

Report to the Congress

STUDY TO IDENTIFY MEASURES NECESSARY FOR A SUCCESSFUL TRANSITION TO A MORE ELECTRONIC FEDERAL DEPOSITORY LIBRARY PROGRAM

**As Required By
Legislative Branch Appropriations Act, 1996**

Public Law 104-53

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March 29, 1996**

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**U.S. Government Printing Office
March 29, 1996**



United States Government Printing Office
Washington, DC 20401

OFFICE OF THE PUBLIC PRINTER

March 29, 1996

The Honorable Connie Mack
Chairman
Subcommittee on Legislative Branch Appropriations
Committee on Appropriations
U.S. Senate
Room S-128, The Capitol
Washington, DC 20510

Dear Mr. Chairman:

Pursuant to the requirement contained in Senate Report 104-114 on H.R. 1854, the Legislative Branch Appropriations Act for 1996, and referenced in House Report 104-212, the Conference Report on H.R. 1854, I have the honor to transmit herewith the Report to Congress on the Study to Identify Measures Necessary for a Successful Transition to a More Electronic Federal Depository Library Program. Copies of the Report are also being transmitted to the Chairman of the House Subcommittee on Legislative Appropriations, the Chairman of the House Committee on House Oversight, and the Chairman of the Senate Committee on Rules and Administration.

The Report is being transmitted in draft to comply with the requirement for submission to Congress by March 1996. We propose a 60-day period for public review and comment on the Report before finalization.

Sincerely,


MICHAEL F. DiMARIO
Public Printer

Enclosure



United States Government Printing Office
Washington, DC 20401

OFFICE OF THE PUBLIC PRINTER

March 29, 1996

The Honorable Ron Packard
Chairman
Subcommittee on Legislative Appropriations
Committee on Appropriations
House of Representatives
Room H-147C, The Capitol
Washington, DC 20515

Dear Mr. Chairman:

Pursuant to the requirement contained in Senate Report 104-114 on H.R. 1854, the Legislative Branch Appropriations Act for 1996, and referenced in House Report 104-212, the Conference Report on H.R. 1854, I have the honor to transmit herewith the Report to Congress on the Study to Identify Measures Necessary for a Successful Transition to a More Electronic Federal Depository Library Program. Copies of the Report are also being transmitted to the Chairman of the Senate Subcommittee on Legislative Branch Appropriations, the Chairman of the House Committee on House Oversight, and the Chairman of the Senate Committee on Rules and Administration.

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Sincerely,


MICHAEL F. DIMARIO
Public Printer

Enclosure



United States Government Printing Office
Washington, DC 20401

OFFICE OF THE PUBLIC PRINTER

March 29, 1996

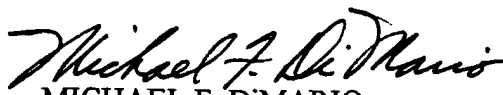
The Honorable John W. Warner
Chairman
Committee on Rules and Administration
U.S. Senate
Room 305, Russell Office Building
Washington, DC 20510

Dear Mr. Chairman:

Pursuant to the requirement contained in Senate Report 104-114 on H.R. 1854, the Legislative Branch Appropriations Act for 1996, and referenced in House Report 104-212, the Conference Report on H.R. 1854, I have the honor to transmit herewith the Report to Congress on the Study to Identify Measures Necessary for a Successful Transition to a More Electronic Federal Depository Library Program. Copies of the Report are also being transmitted to the Chairman of the House Subcommittee on Legislative Appropriations, the Chairman of the Senate Subcommittee on Legislative Branch Appropriations, and the Chairman of the House Committee on House Oversight.

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MICHAEL F. DiMARIO
Public Printer

Enclosure



United States Government Printing Office
Washington, DC 20401

OFFICE OF THE PUBLIC PRINTER

March 29, 1996

The Honorable William M. Thomas
Chairman
Committee on House Oversight
House of Representatives
Room 1309, Longworth Office Building
Washington, DC 20515

Dear Mr. Chairman:

Pursuant to the requirement contained in Senate Report 104-114 on H.R. 1854, the Legislative Branch Appropriations Act for 1996, and referenced in House Report 104-212, the Conference Report on H.R. 1854, I have the honor to transmit herewith the Report to Congress on the Study to Identify Measures Necessary for a Successful Transition to a More Electronic Federal Depository Library Program. Copies of the Report are also being transmitted to the Chairman of the House Subcommittee on Legislative Appropriations, the Chairman of the Senate Subcommittee on Legislative Branch Appropriations, and the Chairman of the Senate Committee on Rules and Administration.

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Report to the Congress

STUDY TO IDENTIFY MEASURES NECESSARY FOR A SUCCESSFUL TRANSITION TO A MORE ELECTRONIC FEDERAL DEPOSITORY LIBRARY PROGRAM

EXECUTIVE SUMMARY

Emerging technologies afford tremendous opportunities for improved and enhanced public access to Government information. These opportunities bring with them new challenges that require the reevaluation of current information dissemination programs in order to adjust them to take advantage of the new opportunities and minimize the disruption in public access during this period of rapid change. The U.S. Government Printing Office (GPO), at the direction of Congress, initiated a cooperative study to identify measures necessary for a successful transition to a more electronic Federal Depository Library Program. The study was begun in August 1995 and concluded in March 1996.

To implement the study, the Public Printer established a working group consisting of representatives from GPO, appropriate Congressional committees, the Congressional Research Service (CRS), the Office of Management and Budget (OMB), the National Archives and Records Administration (NARA), the Federal Publishers Committee (FPC), the Interagency Council on Printing and Publication Services (ICPPS), the Administrative Office of the U.S. Courts, and the depository library community. He also invited a number of organizations to identify representatives to serve as advisors to the working group.

A substantial amount of useful information was gathered and numerous issues and alternatives were identified and examined during the course of the study. These are summarized in this report. A number of specific tasks were identified to provide data and alternatives for consideration. The preparation of the task reports, and the review of public comments resulting from their dissemination, was the primary data gathering activity of the study. Each task report is the product of a substantial amount of effort on the part of the task leader and the participants.

Separately, a document entitled The Electronic Federal Depository Library Program: Transition Plan, FY 1996 - FY 1998 was developed by GPO and included with its FY 1997 appropriations request. Public comments in response to this document also provided useful data to the study participants, and led directly to the development of the Strategic Plan that is included with this report.

Section V, Policy Issues that Impact Publishing Agencies, GPO, NARA, Depository Libraries, the Public and the Private Sector, summarizes the major issues that were identified in the course of the study process. While many of these issues are not new, this study has examined the issues in the new context of the rapid shift of the FDLP into a significantly electronic program.

The major conclusions of the study are summarized below:

Scope of the FDLP: There is widespread interest in expanding the content of the program to make it more comprehensive, and a great deal of optimism that the rapid expansion of agency electronic publishing offers cost-effective options to do so. Nevertheless, the highest priority remains the retention of information content that historically has been in the program and is rapidly leaving it as agencies move from print to electronic publishing or eliminate information products to save costs.

Notification and Compliance: The historical program relied heavily on the ability of the FDLP to "automatically" obtain material as it was printed or procured through GPO. With the increasing emphasis on electronic dissemination, and decreasing compliance with statutory requirements for agencies to print through GPO, identifying and obtaining information for the FDLP is becoming increasingly difficult. There must be new means to inform agencies of their responsibilities and to ensure compliance with agency FDLP obligations. There must be effective means for all three branches of Government to notify GPO of the intent to (1) publish, (2) substantially alter, or (3) eliminate information products and services.

Permanent Access to Authentic Information: The FDLP has always had the responsibility for providing permanent access to the official Government information disseminated through the program. Historically this has been the role of the regional depository libraries, and this has been a cost-effective means of ensuring that Government information remained available to the public indefinitely. Permanent access also is an essential element of the electronic depository library program, but it will be more difficult to attain. To ensure permanent public access to official electronic Government information, all of the institutional program stakeholders (information producing agencies, GPO, depository libraries and NARA) must cooperate to establish the authenticity and provide persistent identification and description of Government information and establish appropriate arrangements for its continued accessibility. This includes establishing standard formats for dissemination and preservation and maintaining the technological currency of the data.

Locator Services: Together the Cataloging and Indexing Program required by 44 U.S.C. §1710 and §1711 and the Locator Services required by 44 U.S.C. §4101 provide the statutory basis for GPO to assist depository libraries and the public to identify and obtain access to the full range of Federal Government information. In a distributed environment, where libraries and users often are accessing remote electronic information rather than local collections, the tools for identifying and locating the information will be critical components of an effective program.

Timetable for Implementation: The Transition Plan, submitted with the GPO FY 1997 appropriations request, projected an ambitious, two and one-half year schedule for conversion to a substantially electronic FDLP (FY 1996 to FY 1998). Input from publishing agencies and depository libraries indicates a five to seven year transition is more realistic and cost-effective since it would allow GPO to change to electronic information as rapidly as the publishing agencies can produce it and the libraries can absorb it. It will be substantially more costly for GPO to convert agency print publications to electronic formats than it will be to work in partnership with the agencies, assisting them in accelerating their own electronic publishing initiatives. Consequently, the Strategic Plan attached to the report as Exhibit 1 proposes a transition during the period from FY 1996 through FY 2001.

Cost of Electronic Information Dissemination: While there are many benefits inherent in the use of electronic information, including more timely and broader public access, there is no empirical data at this time to support the conclusion that it will result in significant savings to the program as a whole in the next few years. Based on comments received, electronic dissemination and access will shift the costs among the participants and will increase costs to the depository libraries and the public, at least in the short run. In addition, this migration requires significant resources which, according to the Strategic Plan, are costs that the Government will incur when it assumes some of the responsibility currently held by regional libraries for ensuring permanent public access to Government information. Costs for migration can be minimized by the adoption and use of open systems standards through the entire life cycle of information

products -- from the time the original source files are created by the publishing agencies to final preservation by NARA. At the same time, depository libraries and their users will have to pay to print, or purchase printed copies, of information that is needed, but no longer disseminated, in print through the FDLP. Libraries also will have to provide specialized staff training, public access workstations and the related services necessary to connect the public to remote Government information.

Technical Implementation Assistance: In order to assure the successful implementation of a more electronic FDLP, the Congress, GPO and the library community must have additional information about future agency publishing plans and current depository library capabilities, as well as an expert evaluation of the cost-effectiveness and usefulness of various electronic formats that may be selected for depository library distribution or access. Therefore GPO should proceed as rapidly as possible with the contract for Technical Implementation Assistance proposed in the Strategic Plan.

Legislative Changes: Substantial changes in the FDLP already are underway within the constraints of the existing statute. Certain key legislative changes could be made in order to accelerate the timetable for, and effectively implement, the transition to a more electronic FDLP. Many of these are reflected in the conclusions provided above.

Report to the Congress

STUDY TO IDENTIFY MEASURES NECESSARY FOR A SUCCESSFUL TRANSITION TO A MORE ELECTRONIC FEDERAL DEPOSITORY LIBRARY PROGRAM

I. INTRODUCTION

Emerging technologies afford tremendous opportunities for improved and enhanced public access to Government information. These opportunities bring with them new challenges that require the reevaluation of current information dissemination programs in order to adjust them to take advantage of the new opportunities and minimize the disruption in public access during this period of rapid change.

The advent of electronic dissemination has brought with it a host of new problems and concerns unheard of, or less prevalent, in the paper-based model of Government information dissemination. In many cases, technology has outpaced efforts of the Government to accommodate and adjust to its development. Several legislative and administrative initiatives over the last decade, including the Paperwork Reduction Act of 1995, the Government Printing Office Electronic Information Access Enhancement Act of 1993, and the 1994 revision of OMB Circular A-130, have attempted to address and/or advance the shift in Government dissemination methods from paper to electronic.

The U.S. Government Printing Office (GPO), at the direction of Congress, initiated a cooperative study to identify measures necessary for a successful transition to a more electronic Federal Depository Library Program (FDLP). The study began in August 1995 and involved representatives from the Legislative, Executive, and Judicial branches of the Government, as well as the depository library community, the national library associations, the information industry, and other appropriate Government and public entities.

In the Senate Report 104-114 to accompany H.R. 1854, the Legislative Branch Appropriations Act of 1996, the Committee stated that:

Public access to Government information is a basic right of every American citizen. The Committee recognizes the critically important service that the Government Printing Office and participating libraries in the Federal Depository Library Program provide to citizens throughout the country in furnishing timely, equitable access to Government information.

While acknowledging that recent advances in technology provide new opportunities for public access to Government information, the report stated that without careful analysis, planning, and a strongly coordinated effort, improvements to the FDLP would be delayed, costly, and might compromise the public's right to Government information. Since the increasing utilization of electronic technologies in support of dissemination programs by all three branches of Government necessitates analysis, planning and a probable restructuring of the FDLP, the Committee directed the Public Printer to initiate a study that:

- Examines the functions and services of the Federal Depository Library Program;
- Surveys current technological capabilities of the participating libraries in the Federal Depository Library Program;
- Surveys current and future information dissemination plans of executive branch agencies;
- Examines and suggests improvements for agency compliance of relevant laws, regulations, and policies regarding Government information dissemination;
- Identifies measures necessary to ensure a successful transition to a more electronically based program;
- Identifies the possible expansion of the array of Federal information products and services made available to participating libraries; and,
- Ensures the most cost effective program to the taxpayer.

The Senate report also directs that the study shall include a strategic plan that will assist the Congress in redefining a new and strengthened Federal information dissemination policy and program. That plan is attached as Exhibit 1. This document, the final study report, was to be made available to Congress by March 1996.

House Report 104-212 to accompany H.R. 1854 concurred with the Senate recommendation, and Public Law 104-53 (109 Stat. 533), the Legislative Branch Appropriations Act, 1996, included the following provision:

Sec. 210. The fiscal year 1997 budget submission of the Public Printer to the Congress for the Government Printing Office shall include appropriations requests and recommendations to the Congress that-

- (1) are consistent with the strategic plan included in the technological study performed by the Public Printer pursuant to Senate Report 104-114;
- (2) assure substantial progress toward maximum use of electronic information dissemination technologies by all departments, agencies, and other entities of the Government with respect to the Depository Library Program and information dissemination generally; and
- (3) are formulated so as to require that any department, agency, or other entity of the Government that does not make such progress shall bear from its own resources the cost of its information dissemination by other than electronic means.

Appropriate sections from the House and Senate reports and from Public Law 104-53 are included in this report as Attachment A. The provision from Section 210 of Public Law 104-53 resulted in the development and submission of The Federal Depository Library Program: Information Dissemination and Access Strategic Plan, FY 1996 - FY 2001 which is provided as Exhibit 1.

II. METHODOLOGY

To implement the study, the Public Printer established a working group consisting of representatives from GPO, appropriate Congressional committees, the Congressional Research Service (CRS), the Office of Management and Budget (OMB), the National Archives and Records Administration (NARA), the Federal Publishers Committee (FPC), the Interagency Council on Printing and Publication Services (ICPPS), the Administrative Office of the U.S. Courts, and the depository library community. He also invited a number of organizations to identify representatives to serve as advisors to the working group. A complete roster of working group members, advisors and GPO support staff is provided as Attachment B.

Following the initial meeting of the working group, a number of tasks were identified to provide data and alternatives for consideration. These tasks included:

- A technical analysis by a Federally-funded research and development center (FFRDC) to determine the most cost-effective way to provide electronic access through the FDLP;
- Identification of relevant laws, regulations, and policies regarding Government information dissemination, and evaluation of agency compliance in so far as they effect the FDLP;
- Identification, acquisition, and evaluation of available information relevant to the study;
- Identification of current and ongoing electronic information dissemination activities for the FDLP;
- Evaluation of incentives for publishing agencies to migrate from print-on-paper products to electronic format;
- Evaluation of current laws governing the FDLP and recommendation of any legislative changes necessary for a successful transition to a more electronic program;
- A survey of Federal agencies to identify CD-ROM titles not currently included in the FDLP and reasons for both participation and non-participation in the program;
- Case studies of specific Federal electronic dissemination initiatives with respect to their costs, and impact on public access to information through the FDLP in comparison with present methods of dissemination;
- Evaluation of issues surrounding inclusion in electronic formats of materials traditionally not included in the FDLP in either paper or microfiche; and
- A review of Federal programs permitting or requiring the sale of information to recover costs, and the effects on efforts to assure free public access through the FDLP.

The complete task list which identifies task leaders and specific case studies is included as Attachment C. Task reports, including reports for each cast study, were distributed to study participants and posted electronically to major Government document listservs for public comment. Task leaders reviewed the comments received and, when appropriate, incorporated these remarks into the final reports. The final task reports are included as Attachments D-1 to D-15.

At Congressional direction, the FFRDC technical analysis was deferred until the data collection from the other study tasks could be completed. The letter from the Joint Committee on Printing denying the initial GPO request for the FFRDC analysis is included as Attachment D-1. Task 2, which involved identification of laws, regulations, and policies regarding Government information dissemination, resulted in the compilation of more than 400 pages of statutory text. Rather than include the complete text of this report, the index for this compilation is included as Attachment D-2. Task 4, which identified current GPO electronic initiatives, was accomplished through a series of demonstrations and presentations given to working and advisory group members; therefore, no report for this task is included in the attachments.

III. PRINCIPLES FOR FEDERAL GOVERNMENT INFORMATION

The FDLF Study brought together representatives from all of the major parties which share an interest in the continued dissemination of, and access to, Federal Government information through the Federal Depository Library Program. Despite differing viewpoints, agendas and responsibilities, study participants did reach consensus on several basic principles for Federal Government information. Over the years, these principles have been expressed by a wide variety of organizations many times and in many different ways. Last year, the National Commission on Libraries and Information Science (NCLIS) republished its principles for comment in the June 9, 1995 issue of the *Federal Register*. The NCLIS principles are included as Attachment E. The principles below, which are derived from the NCLIS principles, served as the underlying foundation for all study group discussion and activities.

Principle 1: The Public Has the Right of Access to Government Information

A cornerstone of every democratic society is the public's right to access Government information. Open and uninhibited access to Government information ensures that the public has the opportunity to monitor and participate in the full range of Government activities. As Thomas Jefferson said in 1816, "If we are to guard against ignorance and remain free, it is the responsibility of every American to be informed." Access to Government information, except where restricted by law, is a basic right of every American citizen. It should not be format dependent, nor should it be compromised by the imposition of excessive fees, time delays or copyright-like restrictions imposed by the Government in a manner that hinders timely access, use or redissemination.

Principle 2: Government Has an Obligation to Disseminate and Provide Broad Public Access to Its Information

The Government should not only allow public participation in the democratic process by providing access to its information, but should encourage public participation and use of Government information through proactive dissemination efforts that ensure timely and equitable public access. This principle was the basis for the establishment of the Federal Depository Library Program more than a century ago. It also is supported by hundreds of other Government statutes which prohibit the copyright of Federal information, mandate affirmative public dissemination of such information and assign dissemination functions to a variety of Federal agencies and government-wide clearinghouses. This responsibility entails providing public access to Government information in such a way that even those citizens without special equipment or training can find, access, and use it. This principle covers access to both Government information products and services and the underlying data from which they are created.

Principle 3: Government Has an Obligation to Guarantee the Authenticity and Integrity of Its Information

Government information is used in many ways, some of which affect the continued health and livelihood of the American public. Any corruption of Government information poses a serious and real threat to the common good. Therefore the Government has an obligation to protect its citizens by guaranteeing to the maximum extent possible the authenticity and integrity of its information. Due to the ease in which it currently is possible to manipulate electronic source files, the obligation to provide long range assurances of authenticity will become increasingly important as more Government information moves to electronic format.

Principle 4: Government Has an Obligation to Preserve Its Information

Government information is part of our national heritage. It documents the fundamental rights of American citizens, the actions of federal officials in all three branches of our Government, and the characteristics of our national experience. Therefore, it is a Government obligation to guarantee the preservation of Government information for future generations of Americans. This principle applies to Government information that contains valuable historical data or that provides significant evidence of the organizations, functions, policies, decisions, procedures, operations or activities of the Government. Despite changing times and technologies, public access to these types of Government information in a meaningful form must be maintained in perpetuity to ensure the continued accountability of the Government to its present and future citizens.

Principle 5: Government Information Created or Compiled by Government Employees or at Government Expense Should Remain in the Public Domain

Except where exempted by law, Government information created or compiled at Government expense or by Government employees as part of their official duties, regardless of the format in which it is published, is in the public domain. The Government is precluded by 17 U.S.C. Chapter 1 from holding copyright protection for its published and/or unpublished works. This prohibition on copyright should not be undermined by the Government's imposition of copyright-like restrictions on the use or reuse of Government information (i.e. imposition of royalties, establishment of exclusive distribution arrangements, denying timely access to underlying data).

IV. MISSION AND GOALS FOR THE FEDERAL DEPOSITORY LIBRARY PROGRAM

MISSION: The mission of the Federal Depository Library Program is to provide equitable, efficient, timely and dependable no-fee public access to Federal Government information products within the scope of the program.¹

¹For purposes of this report, Government information is defined as Government publications, or other Government information products, regardless of form or format, created or compiled by Government employees, or at Government expense, or as required by law. The scope of the FDLP is Government information products, except those determined by their issuing agency to be required for official use only or for strictly administrative or operational purposes which have no public interest or educational value and information classified for reasons of national security. A full list of definitions is included as Attachment F.

The Government's transition to electronic dissemination requires improving the way the Federal Depository Library Program operates, redefining terms taken for granted in the print-on-paper publishing environment, finding ways to use new technologies both to sustain and increase the amount of information in the FDLP, and exploring new methods for the delivery of information in timely, useful formats. However, the underlying mission of the program remains unchanged -- to provide equitable, efficient, timely and dependable no-fee public access to Federal Government information products that fall within the scope of the program. Fulfilling this mission in the rapidly-changing world of electronic information requires the renewed and expanded cooperation of Federal publishers, the Government Printing Office, depository libraries, the National Archives and Records Administration and other organizations both public and private that are committed to the dissemination of, and public access to, Government information.

The goals for an electronic FDLP reaffirm the traditional objectives of the program with a new emphasis that reflects the increasing amount of Government information in electronic form.

GOAL 1: Ensure that the public has equitable, no-fee, local access to Government information through a centrally managed, statutorily authorized network of geographically-dispersed depository libraries. This includes ensuring that depository libraries provide public access workstations and the related services necessary to connect the public to remote Government information and sufficient to assure equitable access to Government information.

GOAL 2: Use new information technologies to improve public access to Government information and expand the array of Federal information products and services made available through the FDLP. This includes (1) ensuring that Government information traditionally in the FDLP in print or microform remains available through the FDLP when converted to electronic form by publishing agencies; (2) converting appropriate Government information products to an electronic format when a suitable electronic format is not available from the publishing agency and conversion is a cost-effective means to disseminate the information to depository libraries; and (3) acquiring, or obtaining access for depository libraries to, electronic Government information products and services which have not been included in the FDLP in print or microform, but which can now be cost-effectively included as electronic products.

GOAL 3: Provide Government information in formats appropriate to the needs of users and intended usage. This includes establishing a reasonable number of standard formats for electronic information disseminated through the FDLP which depository libraries are responsible for supporting.

GOAL 4: Enable the public to locate Government information regardless of formats. This includes (1) participation in, and utilization of, the Government Information Locator Service (GILS) and (2) development of other locator services tailored specifically to the needs of the FDLP.

GOAL 5: Ensure both timely, current public access and permanent, future public access to Government information at or through depository libraries, without copyright-like restrictions on the use or reuse of that information.

GOAL 6: Facilitate preservation of Government information through the National Archives and Records Administration. This includes the transfer to NARA of information disseminated to depository libraries by GPO or held by GPO for depository library access.

GOAL 7: Ensure that the program is cost-effective for all parties involved, including Government publishing agencies, GPO, depository libraries, and the public. This includes a commitment to minimize costs to depository libraries as a result of changes in the FDLP, in order to encourage continued participation in the program and thereby assure broad public access to Government information.

V. POLICY ISSUES THAT IMPACT PUBLISHING AGENCIES, GPO, NARA, DEPOSITORY LIBRARIES, THE PUBLIC, AND THE PRIVATE SECTOR

The issues summarized below were identified during the course of the study. Many of them are explained in greater detail, with examples and alternative solutions, in the individual Task Force Reports that are included as Attachments D-1 to D-15.

ISSUE 1: Redefinition of Terms; Authenticity of Information. The electronic publishing environment necessitates new definitions of terms such as Government Publication, Government Information Product, and Government Information Service as well as new means to identify, and assure the authenticity of electronic Government information.

A. The scope of Government information included in the FDLP and the criteria for excluding information from the FDLP should be reaffirmed through revision of 44 U.S.C. §1901 and §1902. These sections should explicitly include all formats of Government information, including electronic information. Since NARA accepts dissemination through the FDLP as one criteria for identifying information for permanent preservation, this will also serve to define a body of electronic Government information that will be transferred by GPO to NARA for preservation.

B. Means should be found to assure the authenticity of Government information in the FDLP, both for the current users and usage and for permanent access and preservation. This may include the utilization of "signatures" on electronic Government information products (files) and the establishment of a unique and permanent name or identification number for each file that is constant throughout its life-cycle. Authentication efforts should assure the accuracy of the information content without imposing barriers to use or reuse.

ISSUE 2: Changing Roles for FDLP Participants. The focus of the FDLP is changing, so that GPO is providing more access and less dissemination and depository libraries are providing connections to remote information sources, rather than building collections in their own facilities.

A. The role of GPO as the agency responsible for administration of the FDLP should be redefined to include the authority to establish official arrangements for depository library access to information available directly from Federal agencies or other organizations, with the appropriate provisions for permanent access to and through the FDLP. This will assure that GPO, and the depository libraries, can rely on access through these distributed sources, rather than collecting the information for a single, central computer system operated by GPO or requiring the libraries to maintain extensive local collections of electronic Government information.

B. The role of depository libraries should be redefined to include requirements to serve as local providers of public access workstations and the related services necessary to connect the public to remote Government information. This redefinition will result in different types of resource and training requirements that the libraries must meet in order to assure equitable access to Government information.

C. Means should be found to assure that publishing agencies in all branches of the Federal Government are responsible for, and do provide, notification to GPO as the administrator of the FDLP and to other affected parties before they create new Government information products, or significantly change or eliminate existing information products. This includes notification of removal, or change of address or location, of information on an agency Web site when availability on that site is the means by which the agency fulfills its FDLP responsibilities. The Paperwork Reduction Act establishes a notification requirement for publishing agencies in the Executive branch, but it does not explicitly identify GPO, and

the FDLP, as one of the entities that must be notified. There is no comparable statutory requirement for Legislative and Judicial branch publishers. It is not enough to establish the obligation, there must be means to assure compliance if the FDLP and others are to rely on this notification.

ISSUE 3: Permanent Access and Preservation. The requirements for permanent access to and preservation of electronic Government information necessitate a re-evaluation of the life cycle of that information. The best time to assure preservation of official electronic Government information is usually at the time it is prepared, when the originator can certify its authenticity.

A. NARA and GPO should establish an official relationship to assure that electronic Government information disseminated to depository libraries by GPO, or held by GPO for depository library access, is transferred to NARA for preservation in formats acceptable to NARA. Ideally, this should be done in a manner that meets the publishing agencies' requirements for deposit with NARA, so that duplicative preparation and transfer of such information is eliminated.

B. The requirement for permanent public access at or through depository libraries necessitates (1) the creation of information in formats that resist technological obsolescence due to software or platform dependence; and/or (2) periodic review and refreshing of data to different mediums in order to minimize deterioration and assure technological currency throughout its life cycle.

ISSUE 4: Standards. The requirements for timely access to current Government information within the scope of the FDLP and for permanent access to and preservation of that information necessitate the development and implementation of standards for formatting electronic Government information.

A. Broad utilization of Standard Generalized Markup Language (SGML) in the preparation of Government information will facilitate the exchange, dissemination and preservation of that information; however, it will take many years for this to be broadly accepted throughout the Government.

B. As the agency responsible for the administration of the FDLP, GPO will need to establish a range of preferred file formats, including SGML, for use in the FDLP and to recommend (but not require) publishing agencies to use one of those formats when submitting electronic Government information to GPO for FDLP dissemination. Whenever possible, open systems and formats compliant with Federal Information Processing Standards (FIPS) and other national or international standards will be used to assure that the format of the information is not a barrier to its use. Such standardization is essential to assure that depository libraries have the hardware, software and training necessary to assist the public in the utilization of information made available through the FDLP.

C. When agencies cannot, or do not, use one of the preferred formats, GPO will need the authority and the funding to convert agency supplied electronic Government information to one of the preferred formats if that is necessary to assure that the information is appropriate to the needs of users and intended usage. The formats selected for FDLP dissemination must be appropriate for the program's intended audience, representing a broad cross section of the general public. If the format selected by the publishing agency is not suitable for public access through the FDLP, GPO should convert, repackage or scan the information product for distribution through the FDLP. This will not restrict dissemination by Federal agencies in the formats which they feel best serve the needs of their primary constituencies, but rather will supplement agency dissemination efforts by assuring availability to a wider range of users through the FDLP.

D. Where paper and microfiche are formats that do not face technological obsolescence, many electronic information formats are software or platform dependent, necessitating the periodic review and, when necessary, refreshing of that information to newer mediums and or file formats. Creation in, and certification of, information in standard formats that are not technologically dependent is the best way to assure that Government information is preserved and remains permanently accessible.

E. The use of standards in the preparation and dissemination of Government information will also facilitate its incorporation in value-added information products from the private sector and assure a diversity of both public and private sources for Government information.

ISSUE 5: Locator Services. With the proliferation of Government electronic information services, and the necessity to link or direct depository libraries to those services, rather than duplicating them, the provision of comprehensive finding aids and indexing (locator) services is essential. This includes full participation in and utilization of the Government Information Locator Service (GILS), as well as development of other locator services tailored specifically to the needs of the FDLP.

ISSUE 6: Inclusion of Fee-Based Services in the FDLP. The principles for Government information, and many of the laws and policies implementing them, recognize the need for assuring broad access to the public. The statute authorizing the FDLP specifically requires no-fee public access; however, this requirement is often in conflict with statutes establishing fee-based Government information services. Providing GPO with the authority, and funds, to purchase access to fee-based Government information services is one means to reduce this conflict. Implementation of such authority would require the establishment of a basis for determining appropriate fees for depository access and the restrictions, in any, that such services should be able to place on access to the services. Another would be for Congress to require publishing agencies operating under fee-based requirements to provide this information to the FDLP without charge. In either case, such access should never restrict the use and reuse of information provided to the public through the FDLP.

ISSUE 7: Avoidance of Copyright-Like Restrictions. Government information must be available without copyright-like restrictions to assure broad public access and a diversity of sources. When publishing agencies impose, or permit others to impose, copyright-like restrictions on information created or compiled by Government employees or at Government expense, the effect is to restrict public access to that information. This violates the intent, if not the specific provisions, of the laws and policies precluding copyright on Federal information, including the Paperwork Reduction Act and OMB Circular A-130. Nevertheless, budget constraints, requirements for operating cost-recovery information services, and other factors are encouraging agencies to treat Government information as a commodity whose economic value can only be preserved by the imposition of such restrictions. Excessive fees, exclusive arrangements, charging royalties, and placing restrictions on use or reuse of Government information are examples of copyright-like restrictions that must not be permitted. The utilization of proprietary formats may also impose copyright-like restrictions by requiring users to obtain software licenses in order to access the information.

ISSUE 8: Incentives for Agency Compliance with FDLP Requirements. As the agency responsible for the administration of the FDLP, GPO should inform publishing agencies of their obligations to the program. The Office of Management and Budget and the Congress should assist GPO in making sure that agencies understand the requirements for participation in the FDLP and comply with them. GPO should have the ability to offer incentives for participation and to assure publishing agency compliance with statutory obligations to the FDLP.

VI. COMPARISON OF THE HISTORICAL FDLP WITH THE ELECTRONIC FDLP AS ENVISIONED IN THE STRATEGIC PLAN

The Federal Depository Library Program has been in existence for over 150 years. The program has stood the test of time, providing equitable, efficient, timely and dependable no-fee public access to Federal Government information in print and microform, and more recently in electronic formats. It has proven to be a well designed and well balanced program, with clearly defined roles and responsibilities for Federal agencies, GPO, and the depository libraries. However, the advent of electronic dissemination has introduced a host of new problems and concerns unheard of, or less prevalent, in the print-based model of Government information dissemination. This study is part of the process for informing the Congress about the issues and alternatives that should be considered in undertaking such a revision and to assure a successful transition to a more electronic FDLP.

As part of the study, a Strategic Plan was prepared to describe the anticipated evolution of the program through FY 2001. This plan is attached as Exhibit 1. This section of the report provides a comparison of the historical FDLP with the electronic FDLP as it is envisioned in the Strategic Plan. The comparison is made in the context of how the program has met and will meet the goals presented in section IV of this report.

Goal 1: Ensure that the public has equitable, no-fee, local public access to Government information through a centrally managed, statutory authorized network of geographically-dispersed depository libraries.

Historical Model

For more than a century, the Federal Depository Library Program has served the Government and its citizens by providing a national network of libraries through which Government information is made available to the people of the United States, without geographic, economic or administrative barriers. The scope of the program as defined in 44 U.S.C. §1902 includes all "publications except those determined by their issuing components to be required for official use only or for strictly administrative or operational purposes which have no public interest or educational value and publications classified for reasons of national security."

There are currently 1,382 depository libraries located throughout the country, one in almost every Congressional district, as well as in the U.S. territories and possessions. Designation of a depository library is made by a Senator or Member of Congress or by law. Regardless of whether a citizen lives in a poor district in the inner city, a wealthy suburb or a rural area, Government information is accessible to him or her at a depository library in the local area. Depository libraries are required by law to make the publications distributed to them through the FDLP "available for the free use of the general public."

GPO delivers Government publications to depository libraries primarily in print and microfiche. However, an increasing amount of Government information is being distributed in both physical electronic format, such as CD-ROM, and through online electronic services, such as GPO Access. Although the amount of information and the type of facilities vary by depository, traditionally the only equipment depository libraries needed to provide equitable public access to non-print Government information was a microfiche reader or reader/printer. This equipment is relatively inexpensive and simple to operate, and microfiche does not require special training or expertise to use. In recent years, as CD-ROM titles have become a major means for the dissemination of Government information, depository libraries have acquired computer workstations with CD-ROM drives, and some have even offered remote access to

CD-ROM titles through their library networks. Currently 1,140 (83.1%) depository libraries have CD-ROM drives available for use with their Government information collections.² This is somewhat more expensive than microfiche equipment and requires additional training and expertise, particularly given the wide variety of software and data formats used by Federal agencies in their CD-ROM publishing.

Although the amounts and types of equipment vary by library, the formats currently used for dissemination do not preclude depository libraries from selecting the Government information products they feel are needed to best serve their communities. Under the traditional FDLP model, the only major limitations on depository selection of Government information products are available shelf space (or microfiche cabinets) and support staff.

Strategic Plan

Congress has already authorized GPO to disseminate electronic information to depository libraries through the GPO Access legislation (44 U.S.C. §4101). Ensuring equitable public access in an electronic dissemination environment will require two changes to the FDLP. The first involves reaffirmation that the scope of the program includes a comprehensive range of publishing formats. The current scope of the program refers to distribution of Government "publications." The term "publications" implies information published in a static, physical medium. However, electronic information can be dynamic, changeable, distributed and often does not lend itself to physical dissemination. Therefore, the Strategic Plan proposes substituting the term "publications" where it is used in 44 U.S.C. to define the scope of the program with the more generic term "information products" -- this term encompasses both traditional products in physical formats and new electronic information available through Government information services.³

The second significant change will take place in the depository libraries themselves. With the amount and type of electronic information in the program growing rapidly, it will be incumbent upon depository libraries to expand their capabilities at a local level for public access to remote Government information. Despite the increasing amount of Government information available for free public use on the Internet, studies have shown that a significant majority of Americans still lack the necessary equipment, skills, or Internet connections to access Government information online. A recent Nielsen survey found that only 17 percent of the public has access to the Internet, whether at home, at the office, or through a friend's computer.⁴ In addition, the complexity of the distributed information environment has created new problems for the public, eroding the ability of even experienced users to locate the information they need. Depository libraries located in most Congressional districts can meet the needs of this large segment of the American public which has not yet acquired the equipment or expertise necessary to access Government information directly from their home or office.

The Strategic Plan recognizes that in order to provide equitable public access to Government information in an electronic environment, depository libraries will have to accelerate their plans to obtain public access computer workstations, and satisfy the demand for local printing and downloading. According to the 1995 Biennial Survey, only 32 percent of responding depositories currently provide the

²This information is based on data from the 1995 Biennial Survey of Depository Libraries, with all but 10 libraries responses received. A summary of the survey results is available at Attachment G.

³A more complete list of definitions is available as Attachment F.

⁴The CommerceNet/Nielsen Internet Demographics Survey. [New York]: CommerceNet Consortium/Nielsen Media Research, 1995. [<http://www.commerce.net/information/surveys/>]

kind of robust workstation configuration necessary to provide equitable public access to Government information through the Internet. More detailed information from the Biennial Survey is available as Attachment G.

The Strategic Plan suggests that in a significantly electronic FDLP, all depository libraries will have to provide at least one public access workstation with a graphical user interface, CD-ROM capabilities, Internet connections and the ability to access, download, and print extensive products. In addition to hardware and software, depositories will need to provide assistance to patrons in the use of Government information products and services which employ a variety of search engines, user interfaces, and software packages. These requirements are defined in the Recommended Minimum Technical Guidelines for Federal Depository Libraries, which are scheduled to become requirements effective October 1, 1996, and are provided in Attachment H. Acquiring this technical expertise and providing user support for electronic depository collections will require additional depository training and support staff. Depository libraries will have to balance the needs to serve the computer have-nots in society, while preserving and providing access to the historical Government information products contained in their pre-electronic documents collections.

The Strategic Plan also suggests that, in the transition of the FDLP from a series of local repositories to a network of local access points, many depositories may find that they lack the necessary public or private funding to support their transition to electronic access point. The plan proposes that GPO provide up to \$25,000 per library in technology grants to those depositories who demonstrate need and stipulate that no other public or private funding source is available for this purpose. These would be one time grants, available for a single year and totalling no more than \$500,000 per year. In addition, the Strategic Plan envisions an expanded role for GPO in providing support services to depositories including, but not limited to, locator services, user support, training, and documentation.

Goal 2: Use new information technologies to improve public access to Government information and expand the array of Federal information products and services made available through the FDLP.

Historical Model

As the primary provider of printing services for the Government, GPO is able to identify and acquire information for the FDLP when publishing agencies submit printing requisitions to GPO in the course of printing or contracting for the printing of their publications. The number of copies needed for depository distribution is added automatically to the agency's printing requisition as a "rider." Therefore, GPO's integral role in the production process historically has ensured that publications are identified and acquired for the FDLP, without agencies having to be aware of their obligations to the program. With the vast amount of Government information flowing through the GPO print production process, and thereby finding its way into the FDLP, expanding the array of Government information products available for public access was never a primary concern for the program.

In the historical model for the FDLP, paper was the primary format used for dissemination of Government information. Advances in printing technology over the years have changed the production process for Government publications, but they have not changed the way in which Government information is distributed or made available to the public through depository libraries. Before the advent of electronic dissemination, the only technology that significantly impacted FDLP dissemination was micrographics. The FDLP began using microfiche as a format for dissemination in the early 1970's. The use of micrographics allowed GPO to distribute a slightly greater amount of material to depositories at a significantly lower cost to the Government. No major changes to the FDLP distribution system were needed because microfiche was a physical format. The investment depository libraries needed to make in order to provide public access to microfiche information was relatively small, usually no more than a few

hundred dollars per library for a microfiche reader or reader/printer. Depository patrons could access the exact graphical image of a printed publication simply by placing a sheet of microfiche in the microfiche reader; therefore no special training or user support was needed to use information in this format.

Due to the vast quantity of Government information disseminated through the program, and the physical limitations of depository libraries for storing print and microfiche, the historical model for the FDLP necessitated a distinction between "selective" depository libraries and "regional" depository libraries. Selective depositories pre-select a limited number of publications they wish to receive based on the specific needs and interests of the communities they serve. Fifty-three "regional" depository libraries receive everything that is distributed through the program. If a member of the public does not find the information they need at a selective depository library, they can arrange for an inter-library loan with another depository that does elect to receive that information. While this is not as timely as on-demand access from an online service, the delay is not so lengthy that it significantly impedes public access.

Government information in paper or microfiche is available at depository libraries for on-site use by members of the public. Users can borrow material to read at home or in the office, or may select to pay to copy or print it out in order to keep the information permanently. Since the initiation of the GPO Access online services, authorized by 44 U.S.C. §4101, the public has free access to online information on site in depository libraries or remotely through depository library gateways as well as directly from GPO.

Strategic Plan

The electronic Federal Depository Library Program as outlined in the Strategic Plan will take advantage of the increasing amount of Government information available in electronic form to expand and enhance the array of Government information available to the public. An increasing amount of Government information is available from agency publishers in electronic formats. This information falls into three categories: (1) information that is currently included in the FDLP in print, but not electronic form, (2) information that previously was included in the FDLP in print, but that fell out of the program when the publishing agency converted it to electronic format, and (3) information that has never been a part of the program for various operational or financial reasons. Often this information is more timely, useful, and less expensive in electronic form than it is in print.

The Strategic Plan proposes four ways in which GPO can bring this electronic information into the FDLP:

- GPO can identify, describe and link the public to the wealth of distributed Government information maintained at agency sites for free public use.
- GPO can establish reimbursable agreements with agencies that provide fee-based electronic services in order to provide free public access to their information through the FDLP.
- GPO can "ride" agency requisitions and pay for depository copies of tangible electronic information products even if they are not produced by GPO.
- GPO can obtain electronic source files from agencies for information they do not wish to disseminate through their own sites for mounting on GPO Access for free public and depository use.

GPO's ability to provide timely and comprehensive access to Government electronic information products will be dependent on the receipt of timely notification from publishing agencies when they initiate, substantially modify, or terminate an information product. Both the Paperwork Reduction Act and

OMB Circular A-130 require Executive Branch agencies to provide such notice to affected parties. The proposed revisions to 44 U.S.C. §1902 discussed in Task 6 [Attachment D-5] establish a specific requirement for notification of GPO by all branches of Government. The proposal suggests the following language:

Agencies shall notify the Superintendent of Documents of their intent to initiate any Government information product and shall notify the Superintendent of Documents at such time as they substantially modify, or terminate a product available via a Government electronic service.

The task report also discusses an addition to 44 U.S.C. Chapter 19 that would require agencies to provide the Superintendent of Documents with timely notice of any tangible electronic product produced or procured outside of GPO, so that the Superintendent of Documents can make arrangements to ride the agency requisition for depository copies on an incremental cost basis.

Several benefits will be realized from the inclusion of more electronic information in the FDLP. When mounted to an online service, electronic information can be accessed simultaneously from multiple sites located across the country within minutes of its creation. This means that information products like agency press releases can be made accessible at or through depository libraries when public interest in the information is at its peak, whereas previously it may have taken weeks for the printed press release to arrive in a depository shipment. Another major benefit of electronic information is the ease in which it can be manipulated and searched. Unlike paper or microfiche, electronic data is dynamic. For example, locating agency regulations on toxic waste management published in the paper *Federal Register* required a user to scan through indices and pages of text manually. This was a very time-consuming and labor-intensive process. The same search on the electronic *Federal Register* database can be done in seconds with a simple key word search that locates and ranks all references in the *Federal Register* over a specified period of time to toxic waste management. After viewing relevant passages on the screen, the user can paste passages of the text into other word processing software, download the entire file to disc for use at a later time, or print out selected pages.

Use of information technology will not only enhance public access to Government information by improving its timeliness and utility to the user, but will make access to certain types of Government information more widely available. Currently, shelf and cabinet space restrict the amount and type of depository print and microfiche materials selective depository libraries can receive. As more information is included in the FDLP through access to remote information services, the distinction between selective and regional depository libraries will become less meaningful. Selective depository libraries will be able to access the exact same information as regional libraries because the burden for housing the information will rest increasingly with publishing agencies and GPO, instead of individual libraries. The Strategic Plan establishes a two year time frame, at the end of which, all depository libraries will be required to provide access to online electronic Government information services. This will mean that the full range of Government information products available online through the FDLP will be accessible for public use at or through any depository library within two years. In addition, users who have the necessary hardware, software and expertise, can continue to access an expanding array of electronic information available through the FDLP directly from their home or office using depository library Gateways or by contacting GPO online services directly.

GOAL 3: Provide Government information in formats appropriate to the needs of users and intended usage.

Historical Model

The historical model for the FDLP involved dissemination of information primarily in two physical, static formats: paper and microfiche. GPO also has distributed a substantial number of CD-ROM titles to depository libraries, and a limited number of videos, slides, and floppy diskettes. The CD-ROM titles have conformed to the international standards for CD-ROM media and file layout, but have presented a challenge to the libraries due to the wide range of retrieval software and file formats on the discs. Depository libraries have had access to electronic files in a variety of formats on the Federal Bulletin Board since 1992, including ASCII text, various word processing files, dBase databases, Lotus 123 spreadsheets, PostScript files, and Adobe Acrobat Portable Document Format (PDF) files. GPO Access began providing depository libraries with online databases in 1994, offering the *Congressional Record*, the *Federal Register*, the *Congressional Record Index* and Congressional Bills. There are now more than 56 databases available online via GPO Access. Most of the files available from GPO Access are in ASCII text, with graphics provided in Tagged Image File Format (TIFF). Each database that has a print equivalent is also available as Acrobat PDF files. Under the historical model for the FDLP, the availability of electronic information has been used to supplement, but not replace, dissemination of the same information in paper or microfiche. Therefore, while the Federal Bulletin Board and GPO Access online service are heavily used by depository libraries, 52% of depository libraries have not yet registered for the Federal Bulletin Board and 40% indicated that they do not yet offer GPO Access online databases.⁵ The paper and microfiche versions of the *Federal Register* and *Congressional Record* are still selected by more than 1,000 depository libraries either in paper or microfiche.

Strategic Plan

In the future, Federal agencies will continue to have a number of publishing alternatives available for their needs, and many Government publications will continue to be printed. However, it is expected that electronic formats will become the Federal publishing medium of choice, and virtually every printed publication will have an electronic counterpart. Unfortunately, at present no government-wide standard formats have been established for electronic information. Unless Congressional or Administrative direction in this area is forthcoming, it will become increasingly difficult for the FDLP to provide meaningful public access to the wide variety of Government electronic information products and services. It would be unrealistic to expect depository libraries to provide the necessary software and technical support for an unlimited number of electronic formats. Therefore, according to the Strategic Plan, GPO should make every attempt to provide meaningful public access to Government electronic information by converting, repackaging or scanning agency-produced information products into one of a range of standard formats for distribution through the FDLP. This will not restrict Federal agencies from creating or disseminating information in any format that suits their own needs and mission, but rather, it will supplement existing agency dissemination efforts (often tailored to the needs of specific constituencies) and assure broad public access.

The Strategic Plan suggests the need for a "range of standards" for the FDLP that would make it easier to both disseminate and access information in electronic formats. Although GPO is currently using a few "preferred" formats for electronic source files, including ASCII, dBase, Acrobat PDF, and Standard Generalized Markup Language (SGML), the Strategic Plan does not attempt to determine the most

⁵This information is based on data from the 1995 Biennial Survey of Depository Libraries, with all but 10 libraries responses received. A summary of the survey results is available at Attachment G.

appropriate and cost-effective formats for depository dissemination, but suggests that the identification of standard formats be determined through a Technical Implementation Analysis (TIA) contract. Regardless of which formats ultimately are selected, GPO will continue to provide a text-only interface for its online information services in order to maintain compliance with the Americans with Disabilities Act (ADA) and to assure access to users with limited technological and communication capability. Currently 40% of the use of the GPO Access databases is through the SWAIS text-based interface.

GOAL 4: Enable the public to locate Government information regardless of formats.

Historical Model

Historically, GPO has facilitated the identification and location of Government information through its Cataloging and Indexing Program (CIP). This program is authorized by 44 U.S.C. §1710 and §1711. GPO's statutory mission is to provide bibliographic control for all Government documents. GPO fulfills this mission by preparing, publishing, and distributing the *Monthly Catalog of U.S. Government Publications* and a comprehensive index of public documents at the close of each regular session of Congress. A complete and authoritative description for each Government document is prepared by GPO in accordance with nationally accepted cataloging standards and practices. The *Monthly Catalog* and other CIP indexes and finding aids are used by depository librarians to assist the public in the identification of Government information. Electronic access to the *Monthly Catalog* has been available through the Superintendent of Documents' World Wide Web site since June 1995. It is linked to depository item selection, so a user can identify a Government publication in the *Monthly Catalog* and then locate nearby depository libraries that have it available for public use. This is part of GPO's implementation of the requirement for electronic directory, or locator services, under the GPO Access legislation (44 U.S.C. §4101).

GPO has been cataloging Federal CD-ROM titles for inclusion in the *Monthly Catalog* for several years. Recently Federal Web sites also have been included in the Cataloging and Indexing Program. GPO continues to be an active participant in the Government Information Locator Service (GILS) initiative, serving on the GILS administrative board and acting as the host for the GILS records for approximately 25 agencies.

Strategic Plan

The Strategic Plan recognizes that meaningful public access will be possible only if GPO continues to develop appropriate finding aids to assist depository libraries and the public in identifying information available from the Government, regardless of its format or location. Therefore, the plan proposes that GPO accelerate development of Pathway Locator Services (Pathway). These services will use advanced indexing, search, and retrieval tools to identify, describe, and link users to Federal electronic information. Pathway will be developed using open systems standards and will be compatible with complimentary initiatives such as the GILS. The two major components of Pathway will be Pathway GILS Records and the Pathway Indexer. Pathway GILS records will provide basic information for a number of cabinet and other high level Federal agencies in the GILS format and will link users to agency GILS databases and Web sites where available. The Pathway Indexer will allow individuals to search Federal Internet sites by a particular topic or subject matter.

GOAL 5: Ensure both timely, current public access and permanent, future public access to Government information at or through depository libraries, without copyright-like restrictions on the use or reuse of that information.

Historical Model

For more than a century, information delivery through the FDLP has been a linear model: a chain beginning with the publishing agency, linking through GPO and the depository libraries and ultimately reaching the public. Responsibility for public access in the historical model correlates directly to the actual creation, transfer and possession of physical information products. Publishing agencies are responsible for the collection of data and the creation of information products. GPO acquires the information through the print production process, determines independent of the publishing agency whether to distribute the information in paper or microfiche, and ships authentic Government publications to depository libraries. Depository libraries assume custody of the information upon receipt and then are responsible for processing and storing the Government publications for no-fee public access, use, and reuse without copyright restrictions. As required by law, selective depository libraries retain the information they receive for at least five years. Fifty-three regional depository libraries retain all Government publications distributed to them through the FDLP, except superseded publications or those issued later in bound form, in perpetuity. This means that Government information published today will be available for the researcher, scholar, or student a hundred years from now, just as documents dating back to the Civil War are available to the public through depository libraries today. Government information available through the FDLP is free from copyright and can be used or redisseminated by the public as it so chooses.

Strategic Plan

The Strategic Plan proposes a new FDLP model that allows the traditional partners in the program to interact in new ways and which defines the various partners in the process by the services they provide rather than by the actions they perform. Publishing agencies, GPO, and depository libraries, will be expected both to perform their current functions and assume new responsibilities previously the sole province of one of the other partners in the FDLP model.

Agencies will remain responsible for the collection of data and the creation of information products. According to the Strategic Plan, the next step in the process will involve proactive negotiation and coordination between GPO and the issuing agencies regarding appropriate formats for immediate and permanent public access and custody of the information. The issuing agency will determine the format used in the dissemination of the information for their own purposes and for dissemination to depository libraries when depository access is provided directly through the agency's own site. When agencies choose to transfer their electronic information to GPO for the FDLP, GPO will determine the most appropriate format for dissemination and/or access, as authorized under 44 U.S.C. §1914, which authorizes GPO to determine the "measures [it] considers necessary for the economical and practical implementation of [the Federal Depository Library Program]."

Previously these measures were limited by the number of formats available for dissemination. However, information technology now provides GPO with a wide range of dissemination options, many of which will cast GPO in the roles of disseminating agent and "publisher" of Government information products. For example, an agency might issue weekly press releases through its own Internet site. At the end of each year it might remove these releases from the agency site and pass them to GPO for permanent public access through the FDLP. Instead of remounting the releases to the Internet through GPO Access, GPO may decide it is more economical to pack and "publish" the press releases on a CD-ROM for distribution to depository libraries. In effect, GPO has become the "publisher" of a Government information product through its creation and production of this annual compilation.

In the historical model, information would move forward through distribution channels to the point of access, depository libraries, where it would ultimately reside for both immediate and permanent public access. In the new FDLP model, forward movement of information can stop at any one of the points in the dissemination process: the point of creation (the issuing agency), the point of coordination (GPO), or the point of local access (depository library). Nor will Government information always reside at the same location both for immediate and permanent access. When Federal agencies and GPO choose to retain physical custody of information for on demand depository access, they also assume responsibility for storage and maintenance and ensuring the information's authenticity. Some agencies may decide to fulfill these obligations for public and depository access through their own facilities for the short term, only to pass responsibility for the information on to GPO for the long term. Depository libraries will have to assist members of the public in determining at which point(s) in the new FDLP model the Government information relevant to their needs resides, whether it was published ten days or ten years ago.

As with the historical model, any Government information provided to the public under the auspices of the FDLP will remain free of copyright or copyright-like restrictions, regardless of its format or physical location. For example, the report on Task 9 [Attachment D.11] describes one alternative by which GPO would negotiate an agreement to purchase access for depository libraries when agency information is available electronically for a fee. The alternative states that "the agreement may include limitations on numbers of users or on remote access via library networks, but will not include any copyright-like restrictions on the use or reuse of the information."

GOAL 6: Facilitate preservation of Government information through the National Archives and Records Administration.

Historical Model

The National Archives and Records Administration (NARA) is the repository for the Government's permanent records. These are those records appraised by NARA as having sufficient historical or other value to warrant continued preservation beyond the time they are needed for administrative, legal, or fiscal purposes. No more than 5 percent of the records created by the Federal Government fall into this very select category, but this has traditionally included all formal publications of Federal agencies. In addition to any agency transfer of publications, NARA accepts for deposit from GPO one copy of every publication cataloged through the Cataloging and Indexing Program and/or distributed by GPO for the Federal Depository Library Program. GPO transfers a full collection to NARA after the completion of each four-year Presidential term. These procedures have resulted in the granting of permanent preservation status within NARA to all Government information in the CIP or FDLP as part of the definitive official collection of U. S. Government publications.

Strategic Plan

GPO will continue to transfer to NARA a collection of the information it disseminates to depository libraries or holds for depository library access. Whenever possible, electronic information will be transferred to NARA in formats acceptable for archival purposes (36 CFR 1228.188). When that is not possible, GPO, NARA and the publishing agency will coordinate efforts to devise special transfer procedures. Ideally, transfers from GPO to NARA in suitable archival formats will be recognized as meeting the publishing agencies' archival requirements with respect to NARA, so that duplicative preparation, transfer and accessioning of such information is eliminated. Transfer of depository material will not preclude continued maintenance of the information by, or under the authority of, GPO for permanent public access through the FDLP.

GOAL 7: Ensure that the program is cost-effective for all parties involved, including Government publishing agencies, GPO, depository libraries, and the public.

Historical Model

The FDLP exemplifies how a Federal program can provide an essential public service with a modest investment that is returned many fold by the participation of partners in the communities that benefit from the service. In this instance the partner libraries share the responsibilities and the costs to assure broad public access to Government information in their local communities.

In the traditional FDLP model, there are a variety of costs associated with providing public access to Government information. The Government bears only a small portion of these costs when it pays for the printing and distribution of publications and information products to depository libraries. 44 U.S.C. §1903 clearly defines the division of production costs for depository copies of Government print publications. It states that the:

The cost of printing and binding those publications distributed to depository libraries obtained elsewhere than from the Government Printing Office, shall be borne by components of the Government responsible for their issuance; those requisitioned from the Government Printing Office shall be charged to appropriations provided the Superintendent of Documents for that purpose.

44 U.S.C. Chapter 19 does not specifically address the division of production costs for electronic information products, which can be created and disseminated at great cost, but without any costs incurred for "printing and binding." However, the replication of CD-ROM titles, and the payment for software licenses associated with those titles, has been handled in a manner consistent with this provision.

Most of the material distributed to depository libraries in print and microfiche is produced or procured by Federal agencies through GPO. The centralized production and distribution of depository materials through the Government Printing Office offers significant economies of scale. For example, in FY 1995 GPO distributed more than 16.7 million copies of 44,734 different titles, at an average cost of \$1.36 per copy. Centralized funding of the FDLP also facilitates Congressional oversight of the program, thereby deterring the misuse or mismanagement of appropriated funds.

Depository libraries, composed of both public and private institutions, bear the bulk of the costs for public access to Government information. They supply the funds for the processing, use, storage and retention of depository materials. This includes providing support staff, facilities, equipment, and telecommunications. Depository libraries typically spend three to five times the dollar value of the Government information products they receive in support of public access to their depository collections.⁶

Strategic Plan

The Strategic Plan recognizes that the transition to electronic dissemination of Government information changes the costs associated with the administration of, and participation in, the FDLP. It outlines a new direction for the program that seeks to strike a balance between paper-based and electronic-based dissemination which maintains a reasonable distribution of costs among publishing agencies, the Government Printing Office, depository libraries and the public.

⁶Robert E. Dugan and Ellen M. Dodsworth, "Costing Out a Depository Library: What Free Government Information?" *Government Information Quarterly*, Volume 11, Number 3 (1194), pages 261-284.

In some instances, the transition to electronic dissemination will provide savings for one of these parties at the price of incurring new costs for another; thus shifting costs between the parties involved rather than reducing costs overall. Take for example, the costs associated with permanent retention of electronic Government information for public use. In the historical model, the primary cost incurred by regional depository libraries for permanent retention of print publications was providing adequate storage space. In the electronic environment, information can be stored more easily and cost-effectively on a computer. However, unlike physical print products that remain relatively stable over long periods of time, electronic information must be "refreshed" or migrated to new and different mediums to prevent deterioration, avoid technological obsolescence, and assure information integrity and quality. This migration requires significant resources which, according to the Strategic Plan, are costs that the Government will incur when it assumes some of the responsibility currently held by regional libraries for ensuring permanent public access to Government information. Costs for migration can be minimized by the adoption and use of open systems standards through the entire life cycle of information products -- from the time the original source files are created by the publishing agencies to final preservation by NARA. At the same time, depository libraries and their users will have to pay to print, or purchase printed copies, of information that is needed, but no longer disseminated, in print through the FDLDP.

The Strategic Plan proposes retention and expansion of the level of FDLDP funding through the Government Printing Office. According to the plan, with adequate agency notification, GPO will continue to "ride" and pay for depository copies for tangible electronic information products, *whether or not they are produced or procured through GPO*. In addition, Tasks 9 [Attachment D-11], Task 10A [Attachment D-14] and Task 10B [Attachment D-15] all discuss alternatives through which GPO would purchase access to agency online services when an agency is required by law to recover costs for such services. In such scenarios, there will be no copyright-like restrictions on the use or reuse of the information content, but gateway access to the fee-based information services through depository libraries may be restricted or prohibited in order to safeguard the publishing agencies' ability to recover operating costs. Publishing agencies also will be able to transfer to GPO information that they can no longer support public access to on their own agency sites. GPO will pay to mount, convert and maintain this data on GPO Access for permanent depository library and public access. This range of funding options will make electronic dissemination through the FDLDP cost-effective for publishing agencies.

GPO will realize savings from a reduction in printing and distribution costs associated with the paper and microfiche versions of products it makes available electronically through the FDLDP. For example, as illustrated in Task Report 10B [Attachment D-15], providing depository library access to MEDLINE and eliminating paper distribution of just three NLM products to depository libraries could result in annual savings to GPO of more than \$338,000, less whatever amount would be paid to NLM for depository access. Likewise, if GPO eliminated paper distribution of the Congressional Serial Set to selective depository libraries and replaced it with a quarterly CD-ROM as discussed in Task 8B [Attachment D-8], the agency could realize cost savings of more than \$1 million. These potential cost savings would be even greater if Congress provided the electronic source files for the Reports and Documents which make up the Serial Set to GPO.

Depository libraries will realize cost savings through the reduction in the amount of Government information they must store and maintain. For example, whereas depository libraries once had to have several shelves of space for the United States Code in print, this same information now is available on a single CD-ROM or online from GPO Access. However, depository libraries will incur new costs for ongoing acquisition and upgrade of software and computer systems, specialized training for staff, and connections to telecommunications networks. The Strategic Plan suggests several ways in which GPO can ease the financial burden of the transition on depository libraries. One of these is the establishment and promotion of a limited range standard formats for FDLDP use. This will minimize the costs to depository libraries by reducing the range of platforms and software that the libraries must acquire and support. In addition, it proposes that GPO provide \$500,000 in assistance to financially needy depository libraries through

one-time technology grants of up to \$25,000 per library in FY 1997. In addition, the Strategic Plan proposes an increase of \$20,000 in the FY 1997 Salaries and Expenses Appropriation (S&E) in order for GPO to devote additional resources for training and continuing education opportunities for depository librarians.

There is no empirical data at this time to support the conclusion that electronic dissemination will always save the Government money. As shown in Task 8A [Attachment D-7], there will be times when the cost to the Government for providing permanent electronic access to information exceeds the one-time costs associated with producing and distributing the same information in print or microform. However, as explained above, there are many instances when dissemination is more cost-effective electronically than it is in paper or microfiche. The more electronic FDLP as proposed by the Strategic Plan will seek to identify and cultivate those instances when information technology can be used both to save the Government money and to enhance and expand public access.

VII. RESULTS AND CONCLUSIONS

A substantial amount of useful information was gathered and numerous issues and alternatives were identified and examined during the course of the study. These are summarized in this report. A number of specific tasks were identified to provide data and alternatives for consideration. The preparation of the task reports, and the review of public comments resulting from their dissemination, was the primary data gathering activity of the study. Each task report is the product of a substantial amount of effort on the part of the task leader and the participants.

Separately, a document entitled The Electronic Federal Depository Library Program: Transition Plan, FY 1996 - FY 1998 was developed by GPO and included with its FY 1997 appropriations request. Public comments in response to this document also provided useful data to the study participants, and led directly to the development of the Strategic Plan that is included with this report.

Section V, Policy Issues that Impact Publishing Agencies, GPO, NARA, Depository Libraries, the Public and the Private Sector, summarizes the major issues that were identified in the course of the study process. While many of these issues are not new, this study has examined the issues in the new context of the rapid shift of the FDLP into a significantly electronic program.

The major conclusions of the study are summarized below:

Scope of the FDLP: There is widespread interest in expanding the content of the program to make it more comprehensive, and a great deal of optimism that the rapid expansion of agency electronic publishing offers cost-effective options to do so. Nevertheless, the highest priority remains the retention of information content that historically has been in the program and is rapidly leaving it as agencies move from print to electronic publishing or eliminate information products to save costs.

Notification and Compliance: The historical program relied heavily on the ability of the FDLP to "automatically" obtain material as it was printed or procured through GPO. With the increasing emphasis on electronic dissemination, and decreasing compliance with statutory requirements for agencies to print through GPO, identifying and obtaining information for the FDLP is becoming increasingly difficult. There must be new means to inform agencies of their responsibilities and to ensure compliance with agency FDLP obligations. There must be effective means for all three branches of Government to notify GPO of the intent to (1) publish, (2) substantially alter, or (3) eliminate information products and services.

Permanent Access to Authentic Information: The FDLP has always had the responsibility for providing permanent access to the official Government information disseminated through the program. Historically this has been the role of the regional depository libraries, and this has been a cost-effective means of ensuring that Government information remained available to the public indefinitely. Permanent access also is an essential element of the electronic depository library program, but it will be more difficult to attain. To ensure permanent public access to official electronic Government information, all of the institutional program stakeholders (information producing agencies, GPO, depository libraries and NARA) must cooperate to establish the authenticity and provide persistent identification and description of Government information and establish appropriate arrangements for its continued accessibility. This includes establishing standard formats for dissemination and preservation and maintaining the technological currency of the data.

Locator Services: Together the Cataloging and Indexing Program required by 44 U.S.C. §1710 and §1711 and the Locator Services required by 44 U.S.C. §4101 provide the statutory basis for GPO to assist depository libraries and the public to identify and obtain access to the full range of Federal Government information. In a distributed environment, where libraries and users often are accessing remote electronic information rather than local collections, the tools for identifying and locating the information will be critical components of an effective program.

Timetable for Implementation: The Transition Plan, submitted with the GPO FY 1997 appropriations request, projected an ambitious, two and one-half year schedule for conversion to a substantially electronic FDLP (FY 1996 to FY 1998). Input from publishing agencies and depository libraries indicates a five to seven year transition is more realistic and cost-effective since it would allow GPO to change to electronic information as rapidly as the publishing agencies can produce it and the libraries can absorb it. It will be substantially more costly for GPO to convert agency print publications to electronic formats than it will be to work in partnership with the agencies, assisting them in accelerating their own electronic publishing initiatives. Consequently, the Strategic Plan attached to the report as Exhibit 1 proposes a transition during the period from FY 1996 through FY 2001.

Cost of Electronic Information Dissemination: While there are many benefits inherent in the use of electronic information, including more timely and broader public access, there is no empirical data at this time to support the conclusion that it will result in significant savings to the program as a whole in the next few years. Based on comments received, electronic dissemination and access will shift the costs among the participants and will increase costs to the depository libraries and the public, at least in the short run. In addition, this migration requires significant resources which, according to the Strategic Plan, are costs that the Government will incur when it assumes some of the responsibility currently held by regional libraries for ensuring permanent public access to Government information. Costs for migration can be minimized by the adoption and use of open systems standards through the entire life cycle of information products -- from the time the original source files are created by the publishing agencies to final preservation by NARA. At the same time, depository libraries and their users will have to pay to print, or purchase printed copies, of information that is needed, but no longer disseminated, in print through the FDLP. Libraries also will have to provide specialized staff training, public access workstations and the related services necessary to connect the public to remote Government information.

Technical Implementation Assistance: In order to assure the successful implementation of a more electronic FDLP, the Congress, GPO and the library community must have additional information about future agency publishing plans and current depository library capabilities, as well as an expert evaluation of the cost-effectiveness and usefulness of various electronic formats that may be selected for depository library distribution or access. Therefore GPO should proceed as rapidly as possible with the contract for Technical Implementation Assistance proposed in the Strategic Plan.

Legislative Changes: Substantial changes in the FDLP already are underway within the constraints of the existing statute. Certain key legislative changes could be made in order to accelerate the timetable for, and effectively implement, the transition to a more electronic FDLP. Many of these are reflected in the conclusions provided above. These and other possible changes have been identified and discussed in more detail in the report on Task 6 (Attachment D-5).

draft

LIST OF ATTACHMENTS

Attachment A: Legislative Requirements for the Study

Attachment B: Roster of Working Group Members, Advisors and Staff

Attachment C: List of Tasks

Attachment D: Task Force Reports

- D-1 Task 1: Technical Analysis by a Federally-Funded Research and Development Center**
- D-2 Task 2: Identification of Relevant laws, Regulations and Policies Regarding Government Information Dissemination**
- D-3 Task 3: Bibliography of Information Relevant to the Study**
- D-4 Task 5: Evaluation of Incentives for Publishing Agencies to Migrate from Print-on- Paper Products to Electronic Format**
- D-5 Task 6: Evaluation of Current Laws Governing the Federal Depository Library Program and Recommendation of Legislative Changes**
- D-6 Task 7: Survey Federal Agencies to Identify CD-ROM Titles Not Currently Included in the Federal Depository Library Program**
- D-7 Task 8A: Case Study on Congressional Bills**
- D-8 Task 8B: Case Study on the Congressional Serial Set**
- D-9 Task 8C: Case Study on the Department of Energy (DOE) Research Reports**
- D-10 Task 8D: Case Study on the Office of Technology Assessment (OTA) Reports**
- D-11 Task 9: Inclusion in Electronic Formats of Materials Not Traditionally Included in the FDLP in Either Paper or Microfiche**
- D-12 Task 9A: Case Study on Securities and Exchange Commission EDGAR Data**
- D-13 Task 9B: Case Study on Federal District and Circuit Court Opinions**
- D-14 Task 10A: Case Study on STAT-USA Services**
- D-15 Task 10B: Case Study on the National Library of Medicine MEDLINE Service**

Attachment E: National Commission on Libraries and Information Science (NCLIS) Principles of Public Information

Attachment F: Definitions

Attachment G: Summary of the Results of the 1995 Biennial Survey of Federal Depository Libraries

Attachment H: Recommended Minimum Technical Guidelines for Federal Depository Libraries

Attachment A:
Legislative Requirements for the Study

Legislative Requirements for the Study

[This information was downloaded from legislative databases online via GPO Access.]

Senate Report 104-114 on H.R. 1854; FY 1996 Legislative Branch Appropriations (Pages 48-49)

Public access to Government information is a basic right of every American citizen. The Committee recognizes the critically important service that the Government Printing Office and participating libraries in the Federal Depository Library Program provide to citizens throughout the country in furnishing timely, equitable access to Government information.

The dramatic advances in technology provide new opportunities for enhancing and improving public access. However, the increasing utilization of electronic technologies in support of dissemination programs by all branches of government requires careful analysis, planning, and probable restructuring of the current program. Without this analysis, planning, and a strongly coordinated effort, improvements to the program will be delayed, costly, and very well may compromise the public's right to Government information.

The Committee believes the planning should incorporate the goals of equitable, efficient, timely, and dependable access to Government information. The Committee supports a strong coordinated effort between the respective oversight and appropriation committees, the Government Printing Office, executive branch agencies, participating depository libraries, and other relevant and appropriate organizations.

To this end, the Committee directs the Public Printer to initiate a study, under the direction of the Committee, that:

- Examines the functions and services of the Federal Depository Library Program;
- Surveys current technological capabilities of the participating libraries in the Federal Depository Library Program;
- Surveys current and future information dissemination plans of executive branch agencies;
- Examines and suggests improvements for agency compliance of relevant laws, regulations, and policies regarding Government information dissemination;
- Identifies measures that are necessary to ensure a successful transition to a more electronically based program;
- Identifies the possible expansion of the array of Federal information products and services made available to participating libraries; and
- Ensures the most cost-efficient program to the taxpayer.

The study shall include a strategic plan that will assist the Congress in redefining a new and strengthened Federal information dissemination policy and program.

In conducting the study, it will be important for the Public Printer to work closely with the respective oversight and appropriation committees, executive branch agencies, other distributors of Federal documents and information products, the Library of Congress, the depository library community, the National Technical Information Service, users, the information industry, and other appropriate organizations. The completed study shall be available to Congress by March 1996.

H.R. 1854: FY 1996 Legislative Branch Appropriations (As Reported in the *Congressional Record*, July 28, 1995, Pages H7965-H7966)

Amendment numbered 34:

That the House recede from its disagreement to the amendment of the Senate numbered 34, and agree to the same with an amendment, as follows:

Restore the matter stricken by said amendment, amended to read as follows:

ADMINISTRATIVE PROVISION

Sec. 210. The fiscal year 1997 budget submission of the Public Printer to the Congress for the Government Printing Office shall include appropriations requests and recommendations to the Congress that--

(1) are consistent with the strategic plan included in the technological study performed by the Public Printer pursuant to Senate Report 104-114;

(2) assure substantial progress toward maximum use of electronic information dissemination technologies by all departments, agencies, and other entities of the Government with respect to the Depository Library Program and information dissemination generally; and

(3) are formulated so as to require that any department, agency, or other entity of the Government that does not make such progress shall bear from its own resources the cost of its information dissemination by other than electronic means.

And the Senate agree to the same.

House Report 104-212: Conference Report on H.R. 1854: FY 1996 Legislative Branch Appropriations (Pages 14-15)

Amendment numbered 34: Deletes a House provision stricken by the Senate which would have amended section 1903 of Title 44, and inserts a provision directing the Public Printer to include in the fiscal year 1997 budget submission a proposal for the depository library program that will result in the conversion of this program to electronic format. The Public Printer is directed to propose a means to create cost incentives for publishing agencies, including the Congress, to migrate from print-on paper products to electronic format. The conferees direct that the Public Printer and Superintendent of Documents consult with the Joint Committee on Printing, House and Senate document publishing managers, and appropriate executive branch officials in the development of the fiscal year 1997 budget program. The conferees also do not intend that the study directed in the Senate report or the plan regarding electronic format should interfere with the activities of the authorizing committees to consider legislation amending Title 44, U.S. Code, or any legislative initiative which will improve the Federal printing program.

ADMINISTRATIVE PROVISION

SEC. 210. The fiscal year 1997 budget submission of the Public Printer to the Congress for the Government Printing Office shall include appropriations requests and recommendations to the Congress that—

(1) are consistent with the strategic plan included in the technological study performed by the Public Printer pursuant to Senate Report 104—114;

(2) assure substantial progress toward maximum use of electronic information dissemination technologies by all departments, agencies, and other entities of the Government with respect to the Depository Library Program and information dissemination generally; and

(3) are formulated so as to require that any department, agency, or other entity of the Government that does not make such progress shall bear from its own resources the cost of its information dissemination by other than electronic means.

Attachment B:

Roster of Working Group Members, Advisors and Staff

**Study to Identify Measures Necessary
for a Successful Transition to a More Electronic
Federal Depository Library Program**

Participants

Representing the U.S. Government Printing Office

| | |
|---------------------|---|
| Mr. Michael DiMario | Public Printer |
| Mr. Wayne Kelley | Superintendent of Documents (Chair of Study) |
| Mr. Frank Biden | Office of Congressional Legislative and Public Affairs |
| Mr. Gil Baldwin | Library Programs Service |
| Mr. Charles C. Cook | Congressional Printing Management Division |
| Mr. Robert Cox | Departmental Account Representative Division |
| Mr. Bill Guy | Office of Budget |
| Ms. Judy Russell | Office of Electronic Information Dissemination Services |
| Mr. Jay Young | Library Programs Service |

Representing the U.S. Congress (Majority Staff)

| | |
|------------------------|---|
| Mr. George Cartagena | Joint Committee on Printing |
| Ms. Christine Ciccone | Senate Committee on Governmental Affairs |
| Mr. Ed Edens | Senate Committee on Rules and Administration |
| Ms. Catherine Fanucchi | House Committee on House Oversight |
| Mr. Doug Fuller | Senate Committee on Governmental Affairs |
| Mr. Larry Harris | Office of Senator Connie Mack |
| Ms. Linda Kemp | Joint Committee on Printing |
| Mr. Keith Kennedy | Senate Committee on Appropriations |
| Mr. Ray Mock | Office of Congressman Ron Packard |
| Mr. Mark Uncapher | House Committee on Government Reform and Oversight, Subcommittee on Government Management, Information and Technology |

Representing the U.S. Congress (Minority Staff)

| | |
|---------------------|--|
| Mr. John Chambers | Joint Committee on Printing |
| Mr. Don DeArmon | Office of Congressman Vic Fazio |
| Mr. Jim English | Senate Committee on Appropriations |
| Ms. Kennie Gill | Senate Committee on Rules and Administration |
| Mr. Charlie Howell | House Oversight Committee |
| Mr. Eric Ilgenfritz | Office of Senator Patty Murray |
| Mr. Robert Mansker | Joint Committee on Printing |
| Mr. David McMillen | Committee on Government Reform and Oversight |
| Mr. David Plocher | Committee on Governmental Affairs |

Representing the Library of Congress

| | |
|----------------------------|--------------------------------|
| Ms. Jane Bortnick Griffith | Congressional Research Service |
| Mr. Harold Relyea | Congressional Research Service |

Representing the Office of Management and Budget

| | |
|---------------------|--|
| Mr. Bruce McConnell | Office of Information and Regulatory Affairs |
| Mr. Glenn Schlarman | Office of Information and Regulatory Affairs |
| Mr. Peter Weiss | Office of Information and Regulatory Affairs |

Representing the National Archives and Records

| | |
|--------------------|-------------------------------|
| Mr. Tom Brown | Center for Electronic Records |
| Ms. Fynnette Eaton | Center for Electronic Records |

Representing the Federal Publishers Committee

| | |
|-----------------|--|
| Mr. Ken Rogers | STAT-USA, Department of Commerce |
| Mr. John Weiner | Information and Administration Services, Energy Information Administration |

Representing the Interagency Council on Printing and Publication Services

| | |
|-----------------|--|
| Mr. Roy Francis | Branch of Policy and Printing Management, Department of the Interior |
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Representing the Administrative Office of the U.S. Courts

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| Mr. Gary Bowden | |
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Representing the Depository Library Community

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|-------------------|--|
| Ms. Julia Wallace | Government Publications Library, University of Minnesota |
|-------------------|--|

Advisors

| | |
|--------------------------|---|
| Ms. Prudence Adler | Association of Research Libraries |
| Ms. Mary Alice Baish | American Association of Law Libraries |
| Mr. Dan Duncan | Information Industry Association |
| Ms. Diane Garner | Harvard University, American Library Association/GODORT |
| Ms. Anne Heanue | American Library Association |
| Ms. Carol Henderson | American Library Association |
| Mr. Lloyd Hysan | U.S. Supreme Court |
| Mr. Donald Johnson | National Technical Information Service and CENDI |
| Mr. Peyton Neal | Information Industry Association |
| Mr. Dan O'Mahony | Brown University, Depository Library Council |
| Ms. Lois Schoenbrun | Special Libraries Association |
| Ms. Lynne Siemers | Washington Hospital Center, Medical Library Association |
| Ms. Jeanne Hurley Simon | National Commission on Library and Information Science |
| Mr. Frederick Weingarten | Computing Research Associates, American Library Association |
| Mr. Peter Young | National Commission on Library and Information Science |

GPO Staff

| | |
|------------------------|---|
| Mr. Jeff Axline | Library Programs Service |
| Ms. Terri Barnes | Office of Electronic Information Dissemination Services |
| Ms. Michael Bright | Office of Electronic Information Dissemination Services |
| Mr. Michael Clark | Library Programs Service |
| Mr. Ric Davis | Library Programs Service |
| Mr. Jerry Hammond | Congressional Printing Management |
| Ms. Robin Haun-Mohamed | Library Programs Service |
| Ms. Wendy Frederick | Documents Technical Support |
| Mr. Joseph McClane | Bibliographic Systems Branch |
| Ms. Sheila McGarr | Library Programs Service |
| Ms. Maggie Parhamovich | Library Programs Service |
| Mr. Joseph Paskoski | Library Programs Service |
| Mr. Berry Reece | Office of Marketing |
| Mr. Andy Sherman | Office of the Public Printer |
| Mr. Willie Thompson | Library Programs Service |
| Mr. Tony Zagami | Office of the General Counsel |

Special thanks is given to Ms. Wendy Kloiber Frederick who provided the primary staff support for the study and to Mr. Ric Davis who assisted her with the drafting and editing of the report.

Attachment C:

List of Tasks

DRAFT

**STUDY TO IDENTIFY MEASURES NECESSARY
FOR A SUCCESSFUL TRANSITION TO A MORE ELECTRONIC
FEDERAL DEPOSITORY LIBRARY PROGRAM**

Initial Tasks for Implementation

1. Technical analysis by a Federally-funded research and development center (FFRDC) to determine the most cost effective way to provide electronic access to Federal government publications to the American public through the Federal Depository Library Program **[Task Leader: Jay Young]**
2. Identification of relevant laws, regulations and policies regarding Government information dissemination and evaluation of agency compliance in so far as it effects the Federal Depository Library Program **[Task Leaders: Jane Griffith (identification) and Judy Russell (compliance)]**
3. Identify, acquire and evaluate already available information, both published and unpublished, relevant to the study **[Task Leader: Julia Wallace]**
4. Identification of current and ongoing electronic information dissemination activities for the Federal Depository Library Program **[Task Leader: Judy Russell]**
5. Evaluation of incentives for publishing agencies to migrate from print-on paper products to electronic format, for inclusion in the FY 1997 Federal Depository Library budget submission **[Task Leader: Roy Francis]**
6. Evaluation of current laws governing the Federal Depository Library Program and recommendation of legislative changes, if any, necessary for a successful transition to a more electronic program **[Task Leader: Jay Young]**
7. Survey Federal agencies to identify CD-ROM titles that are not currently included in the Federal Depository Library Program **[Task Leader: Gil Baldwin]**
8. Individual case studies of specific Federal electronic information dissemination initiatives with respect to their costs, and impact on public access to information through the Federal Depository Library Program in comparison with present methods of dissemination. Case studies include Congressional Bills, the Congressional Serial Set, Department of Energy (DOE) research reports and Office of Technology Assessment (OTA) reports **[Task Leaders: Charles Cook (Congressional information), Gil Baldwin (DOE), Fynnette Eaton and Tom Brown (OTA)]**
9. Evaluation of issues surrounding inclusion in electronic formats of materials not traditionally included in the FDLP in either paper or microfiche, including case studies on Securities and Exchange Commission EDGAR data and Federal District and Circuit Court opinions **[Task Leaders: Julia Wallace (overview and SEC) and Gary Bowden (Federal courts)]**
10. Review of Federal programs permitting or requiring the sale of information to recover costs, and the effects on efforts to assure free public access through the FDLP, including case studies on STAT-USA and the National Library of Medicine MEDLINE Service **[Task Leader: Ken Rogers (overview and STAT-USA) and Gil Baldwin(MEDLINE)]**

Individuals and organizations wishing to provide comments or suggestions about the study or specific study tasks can send Internet e-mail to study@gpo.gov or send a fax to the attention of FDLP Study at 202-512-1262. Correspondence can be addressed to FDLP Study, Mail Stop SDE, U.S. Government Printing Office, Washington, DC 20401.

Individual task leaders can be contacted directly as follows:

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Attachment D:

Task Force Reports

- D-1 Task 1: Technical analysis by a Federally-funded research and development center (FFRDC)
- D-2 Task 2: Identification of relevant laws, regulations and policies regarding Government information dissemination
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Attachment D-1

**Task 1: Technical Analysis by a Federally-Funded
Research and Development Center**

HOUSE OF REPRESENTATIVES

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Congress of the United States

Joint Committee on Printing

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DANIEL E. ROBY, IN

October 10, 1995

95115

The Honorable Michael F. DiMario
Public Printer
U.S. Government Printing Office
Washington, D.C. 20401

Dear Mr. DiMario:

We have considered your request for the approval of \$400,000 to commission a study by a Federally Funded Research Group to examine the technology necessary to implement an electronic dissemination program at the Federal Depository Libraries. We are denying this request at this time. While we strongly concur with the principle of moving toward an electronic dissemination program which will effectively and efficiently provide Federal Government information to the public, we also recognize that this is not the appropriate time to conduct this facet of the study.

GPO is currently conducting a multifaceted study of the Depository Library Program which will compile data about electronic dissemination of information. This study can be conducted and completed without the additional costly independent study. The information collected in the ongoing study will be useful for an implementation plan that will consider the equipment and capabilities of each library in the Depository Program. We anticipate that if we conduct these studies in the appropriate order it will prove to be a more effective use of resources.

The Joint Committee on Printing is prepared to reconsider this request at an appropriate time in the future if so requested.

Best regards,

Bill

Bill Thomas
Chairman

John Warner
John W. Warner
Vice Chairman

Wendell H. Ford
Wendell H. Ford
Ranking Member

Attachment D-2

**Task 2: Identification of Relevant Laws, Regulations and Policies
Regarding Government Information Dissemination**

Attachment D-2

Task 2: Identification of relevant laws, regulations and policies regarding Government information dissemination and evaluation of agency compliance in so far as it effects the Federal Depository Library Program

INTRODUCTION

The FY 1996 Legislative Branch Appropriations Senate Report (104-114) contained language directing the conduct of a study that:

- examines the functions and services of the Federal Depository Library Program, including technological capabilities of the participating libraries;
- surveys current and future dissemination plans of executive branch agencies;
- suggests improvements for agency compliance with relevant laws and policies regarding Government information dissemination; and
- identifies necessary measures to ensure transition to a more electronically based and cost-efficient program.

As part of this effort, CRS was asked to prepare a compilation of statutes authorizing the dissemination of government information to the public. The methodology employed involved searching for relationships of variant forms of keywords in the text portion of the Westlaw online database of The United States Code Annotated. The searches were repeated to allow for all possible word combination and synonyms. The results of these searches were then reviewed by CRS staff to eliminate irrelevant items and identify statutes of known relevance that did not emerge from the searches. Known statutes were retrieved by citation. This process was reiterated until CRS staff had a degree of confidence in the results. The initial searching was conducted in October, 1995, with additional searches performed throughout the revision process.

Statutes mandating the publication of information in the Federal Register or reports to Congress were eliminated. House Document 104-15, prepared by the Clerk of the House, identifies statutory requirements for reports to Congress. Also eliminated were statutes allowing only public examination of agency records, but not calling for affirmative public dissemination. Particular reports and documents specified in Chapter 5, Title 2 and Chapter 13 of Title 44 were not included because there is no language specifically indicating public dissemination.

This methodology, which relies heavily on online searching of a massive database, cannot ensure that all relevant statutory provisions are identified. Thus, a preliminary draft was distributed for review by others, including executive branch personnel, who identified other statutes appropriate for addition to the compilation. We emphasize that this compilation identifies a large survey of statutes providing Federal agencies with authority for disseminating government information to the public, but it cannot be considered exhaustive or definitive.

The statutory provisions identified are listed in order by title and section of The United States Code Annotated. In most cases, the entire section is provided to give adequate context, although in some instances editing was done to reduce the volume of the document. The most relevant passages are underlined. A guide to the relevant sections provides listings according to agency and selected topics. A given section may appear under several headings depending on its contents. What the guide reflects is

that, in addition to broad government-wide information dissemination policies (e.g., those in Title 44), many agencies have some kind of generic publication or dissemination authority. Further, there are many instances where specific authority is granted for the publication or dissemination of particular kinds of information, the production of information services, or the creation of clearinghouses.

Because of the size of the task report, only the indexes are provided in this attachment.

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42 USC 11411(c)
49 USC 5115(d)(1)
Reorganization Plan 4 of 1970, section 1(e)

specific publication production and dissemination

2 USC 150
2 USC 285b(3)
2 USC 438 (a)(2)
5 USC 552(a)(2)
5 USC 552a(f)
7 USC 1736a(b)(3)
7 USC 2330(a)
7 USC 5341(a)
7 USC 5403(c)
7 USC 5711(g)(2)
7 USC 5712(a)(2)
13 USC 7
15 USC 274
15 USC 649(c)(6)(D)
15 USC 2220(a)(6)
15 USC 2663(a)
15 USC 3704(d)(1)
17 USC 707(a)
18 USC 4124(d)
21 USC 358(d)
28 USC 521
31 USC 6104
33 USC 2295
42 USC 286
42 USC 300e(c)(8)
42 USC 300j-24(b)
42 USC 6937(a)
42 USC 6982
44 USC 1314
44 USC 1710
44 USC 1711
44 USC 1714
49 USC 20703(c)
49 USC 20902(c)

statistics dissemination

7 USC 626(a)
13 USC 62
16 USC 742d(a)
20 USC 6041(g)(2)(C)(iv)

20 USC 9001(b)
20 USC 9003
22 USC 3103(a)(5)
22 USC 2122(6)
29 USC 2
29 USC 435
42 USC 300e(c)(8)
42 USC 3012
42 USC 3732(c)
42 USC 7135(a), (d)
49 USC 111(c)(1), (5)
EO 12880, sec. 1(f)

telecommunications technology use

7 USC 3125b(b)
12 USC 4805(a)(1)(B)
20 USC 2402(c)
20 USC 6041(g)
22 USC 5511

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Attachment D-3

Task 3: Bibliography of Information Relevant to the Study

Attachment D-3

Task 3: Identify, acquire and evaluate already available information, both published and unpublished, relevant to the study.

This bibliography includes a selection of articles, books, reports, surveys and documents on subjects related to the study. It is far from comprehensive, but attempts to include a variety of materials and a mix of policy investigations and technical studies. When they were located, Universal Resource Locators (URL's) are provided for materials which are available through the Internet. Materials on the bibliography are grouped into seven general areas:

- * Information Access Policy and Practice
- * Reports and Articles from Depository Library Conferences, Librarians, and Library Associations
- * Surveys on Access to Technologies
- * Archiving and Preservation of Electronic Information
- * Technology and the National Information Infrastructure
- * Selected Congressional Hearings and Reports
- * Government Printing Office Studies

INFORMATION ACCESS POLICY AND PRACTICE

Both general and specific issues relating to government information access policy are explored from a variety of viewpoints in the articles, reports and books listed here. Issues of equity and access appear in many of the publications. Comprehensive overviews are found in the Hernon and Peritt studies, among others. The public's use is investigated in reports from Bauman Foundation, OMB Watch, and Ryan and McClure. And both Birdsall and Crawford urge caution in embracing the myth of the totally electronic library.

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REPORTS AND ARTICLES FROM DEPOSITORY LIBRARY CONFERENCES, LIBRARIANS, AND LIBRARY ASSOCIATIONS

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ARCHIVING AND PRESERVATION OF ELECTRONIC INFORMATION

The technical and procedural issues surrounding the preservation of electronic data are complex and challenging. These publications represent the growing body of research which is proposing a more aggressive stance for the National Archives and Records Administration in obtaining, managing and providing access to electronic information. The Commission on Preservation and Access proposes a national system of digital archives involving many stakeholders.

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Preserving Digital Information: Draft Report of the Task Force on Archiving of Digital Information. Commissioned by The Commission on Preservation and Access and The Research Libraries Group. Version 1.0, August 24, 1995. ([URL:http://www-rlg.stanford.edu/ArchTF/](http://www-rlg.stanford.edu/ArchTF/))

TECHNOLOGY AND THE NATIONAL INFORMATION INFRASTRUCTURE

Literature about the growing National Information Infrastructure abounds. The publications below attempt to define the issues and the roles for the many players, including governments at all levels, libraries, schools, and the non-profit and private sectors.

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United States. Congress. Office of Technology Assessment. *Critical Connections: Communication for the Future* (OTA-CIT-470). Washington, D.C.: G.P.O., 1990. (Y 3.T 22/2:2 C 73/13)

United States. Congress. Office of Technology Assessment. *Making Government Work: Electronic Delivery of Federal Services* (OTA-TCT-578). Washington, D.C.: G.P.O., 1993. (Y 3.T 22/2:2 E 12/12) (URL:<http://otabbs.ota.gov/T23>)

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United States. Congress. Office of Technology Assessment. *Telecommunications Technology and Native Americans: Opportunities and Challenges* (OTA-ITC-621). Washington, D.C.: G.P.O., 1995. (Y 3.T 22/2:2 T 23/2) (URL:<http://otabbs.ota.gov/pub/pdf/telecom.natam/>)

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United States. Information Infrastructure Task Force. *National Information Infrastructure: Agenda for Action*. [Washington, D.C.: Executive Office of the President], Information Infrastructure Task Force, [1993]. (PREX 1.2:IN 3) (URL:<http://sunsite.unc.edu/nii/toc.html>)

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SELECTED CONGRESSIONAL HEARINGS AND REPORTS

In addition to the investigations below, extensive data on the subjects in the study are found in annual appropriations hearings.

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United States. Congress. Joint Committee on Printing. *New Technology and the Government Printing Office Hearings*, 19 June and 24 July 1991 (S. hrg. 102-115). Washington, D.C.: G.P.O., 1992. (Y 4.P 93/1:T 22)

United States. Congress. Joint Committee on Printing. *Provision of Federal Government Publications in Electronic Format to Depository Libraries: Report of the Ad Hoc Committee on Depository Library Access to Federal Automated Data Bases*. Washington, D.C.: G.P.O., 1985. (Y 4.P 93/1:P 92/2)

United States. Congress. Senate. Committee on Labor and Human Resources. *Libraries and their Role in the Information Infrastructure Hearing* 19 April 1994. Washington, D.C.: G.P.O., 1994. (Y 4.L 11/4:S. HRG. 103-569)

GOVERNMENT PRINTING OFFICE STUDIES

United States. Government Printing Office. Library Programs Service. *Electronic Capabilities of Federal Depository Libraries, Summer 1994*. Washington, D.C.: G.P.O., 1995. (GP 3.2:EL 2/2)

United States. Government Printing Office. *Report of the Serial Set Study Group: Investigation of Alternatives for Production and Distribution of the Bound U.S. Congressional Serial Set*. Washington, D.C.: G.P.O., 1995. (GP 1.2:SE 6/3)

United States. Government Printing Office. Superintendent of Documents. *Accessing the Economic Bulletin Board: Electronic Publications in the Federal Depository Library Program Pilot Project Report*. Washington, D.C.: G.P.O., 1994. (GP 3.2:EC 7)

United States. Government Printing Office. Superintendent of Documents. *Accessing U.S. Department of Energy Scientific and Technical Information: Electronic Publications in the Federal Depository Library Program Pilot Project Report*. Washington, D.C.: G.P.O., 1993. (GP 3.2:SCI 2)

United States. Government Printing Office. Superintendent of Documents. *Reading the Congressional Record on CD-ROM: Electronic Publications in the Federal Depository Library Program Pilot Project Report*. Washington, D.C.: G.P.O., 1992. (GP 3.2:C 76/2)

Attachment D-4

**Task 5: Evaluation of Incentives for Publishing Agencies to Migrate
From Print Products to Electronic Format**

TASK 5: Investigate and evaluate possible incentives for publishing agencies, including Congress, to migrate from print-on-paper products to electronic format and include their electronic products in the FDLP.

METHODOLOGY

Input was solicited from the two main agency sources involved in publishing and distribution of information: Information Resource Management (IRM) Officers and Printing Officers. This task was most relevant to the Printing Officers since the request from Congress was to identify cost incentives to migrate from print-on-paper products to electronic format. However, IRM Officers were included in order to identify the opportunities for, and obstacles to, including agency electronic products in the FDLP. From interviewing associates in the two fields, it is apparent that there is a definite difference of opinion on possible incentives for participation in the FDLP. Also, due to the differing procedural functions of the two entities, it was necessary to approach this task from two different perspectives.

BACKGROUND

Printing Management

The printing community is very familiar with 44 U.S.C. Chapter 19 and the Federal Depository Library Program (FDLP). It appears that in this arena there are real possibilities for an effective incentive program. Virtually all publications are made available to the FDLP automatically through the GPO printing procurement process. Only publications procured outside the GPO procurement process, "fugitive documents," fail to be considered for the FDLP. Printing management responses indicate a real perceived value to participation in the FDLP and an appreciation for the incentives already implicit in the current structure, i.e. that GPO pays for printing depository copies when a publication is printed or procured through GPO.

Currently, approximately 50% of all printing requests submitted to GPO are submitted in an electronic format, but this encompasses a wide variety of formats. While this 50% is a basis for electronic distribution, it will require reformatting by the agencies or GPO to put the information in formats useful to and useable by depository libraries. If it becomes mandatory for GPO to make publications available to the FDLP in an electronic format, printing managers fear that the originating office could become responsible for creating, or reformatting, the document in a format suitable for FDLP distribution. If that occurs, it will be an administrative burden on the originating agencies as well as an additional expense, and therefore, a major disincentive to participation in the FDLP. That would lead to more fugitive documents.

Since GPO is the recommended procurement office for Federal printing and the coordinator for the FDLP system, it is reasonable to assume that a program to enhance the FDLP system should start with the GPO. With its FY 1997 budget justification, GPO included The Electronic Federal Depository Library Program: Transition Plan, FY 1996 - FY 1998 (known as the Transition Plan) which sought continued funding and the authority for GPO to create, or reformat, electronic information for distribution through the FDLP.

Information Resources Management (IRM)

Unlike Printing Management, the typical IRM office is unaware of 44 U.S.C. Chapter 19 requirements and the FDLP. There is little doubt that the IRM community has moved into the electronic information management age. With the advent of the Internet, more specifically the World Wide Web, public access to Government information has reached new levels. Virtually all publications that involve IRM are routinely evaluated for dissemination through agencies' Web servers. However, information or documents made available directly to an IRM office may not be intended to be printed. Likewise, documents made to be printed may not be submitted to an IRM office.

A key problem is that an IRM office often does not know what publications have been made available to GPO for printing and likewise the publications being printed often are not made available to an IRM office. It is apparent that the two entities do not communicate as thoroughly as necessary, therefore publications are missed by both offices. There are many legitimate reasons why this happens but subject matter and audience appear to be major considerations in determining whether a publication goes to print-on-paper or to the IRM community.

Typical IRM offices see no incentive to make publications available electronically through the FDLP. The belief is that as long as publications are made available to the public via the Web, their mission of providing information to the American public is complete because the information is available to anyone who has access to a computer and the Internet. This overlooks the necessity to provide information to those who do not have Internet access and a computer as well as the need to provide permanent access, both of which are currently assured by the FDLP.

It should be noted that if the FDLP continues, the general consensus in the IRM community is that all depository libraries should be required to include a minimum standard of computer equipment, including at the absolute minimum: CD-ROM readers, network connections, download and printing capabilities. This, in fact, has occurred and the minimum technical guidelines become requirements in October 1996.

General Conclusions

Although several specific alternatives for new incentives were developed and are discussed below, the strongest incentive identified during this task was, in fact, the one that exists in the current program: make participation as effortless and automatic as possible and at no cost to the agency. One agency official summarized this by saying "first do no harm," i.e. don't distract the agencies from their primary missions or require the expenditure of any of their increasingly scarce resources. The current system where GPO rides agency print orders at its own expense means that merely by printing through GPO, as required by 44 U.S.C., FDLP participation is ensured at no cost to the agency. Whatever new mechanisms are put in place, an electronic depository library program must provide an equally simple and cost-effective means for agencies to participate.

DISSEMINATION ALTERNATIVES

Incentive A

Establish an electronic information management function within the Superintendent of Documents. This would be similar to the current system of publication identification and review via GPO Form 3868 (Notification of Intent to Publish) and the SF-1 (Printing and Binding Requisition), where all publications are reviewed to establish the requirements for depository library distribution as part of the publication process. The electronic information management function would assume those current duties and add to that a determination of balance between electronic requirements and printing needs. It is anticipated that the number of print-on-paper copies will be greatly reduced by this process. GPO would utilize to the extent possible electronic information received from agencies and, when necessary, create or procure alternative formats useful to and useable by depository libraries and the National Archives and Records Administration (NARA). GPO, in conjunction with the depository libraries and within its available funding, could provide access to the information or disseminate it in a tangible form such as CD-ROM. Electronic information included in the FDLP would also be transferred to NARA at the appropriate time and in formats acceptable to NARA. It should be noted that this transfer would not relieve the publishing agency of its archival responsibility without a change in the law or regulations.

Benefits

- This would not affect the procurement process of GPO. It would reduce the number of print-on-paper copies needed for the FDLP, thereby reducing the total cost of printing to GPO.
- Agencies could continue to meet public requests for their information by referring inquiries to depository libraries.

- Agencies would continue to submit documents to GPO in the same manner with no additional burden or cost.
- GPO remains the main focal point for a significant portion of the documents entering the FDLP. This would not adversely affect the current printing procurement procedure, but would continue to funnel documents through a central point for dissemination to the public.
- This alternative allows for standardization of formats of publications for electronic dissemination. Standard formatting is a cause for great concern among all Federal agencies including GPO and NARA. It is widely accepted that this is probably the most imposing task we face in electronic publishing today. This would also provide the option for the agencies to receive their own information back from GPO in one of the standardized formats at little or no additional cost to the agency.
- Reformatting to standard formats by GPO relieves the submitting agency from encumbering their current process. This encourages participation in the FDLP by eliminating the cost for reformatting each publication for electronic dissemination. At the same time, it guarantees widespread distribution of agency publications.
- Providing its electronic information to GPO for FDLP distribution would also fulfill an agency's obligation to NARA. GPO will be responsible for reformatting the data so that it will be acceptable for archiving and for transferring the information to NARA at the appropriate time.

Disadvantages/Problems

- This will not influence the IRM managers who have never used and may be unfamiliar with the traditional print channels at GPO, so it will not be a comprehensive solution.
- GPO will incur additional costs for reformatting, providing access to and storing agency data. Some types of reformatting would result in GPO, rather than the agency, assuming responsibility for the accuracy of the content. If the agency provides GPO with camera copy instead of machine readable data, and is unwilling or unable to provide some electronic format, GPO must scan the information for electronic distribution. Unless scanning is done at a high resolution the image files produced will be only slightly better than microfiche. If scanning is done at higher resolutions, it will be difficult to provide the image files online due to the slower and more limited access methods that many depository libraries currently use to access online services.

Incentive B

For agencies who wish to maintain access to their information themselves, encourage participation in the FDLP by offering to have the GPO Locator direct users to the agency Web sites. Also, offer to provide permanent access through GPO Access and the FDLP when the agency no longer has the desire or resources to maintain the information on its own Web site. Partnerships between GPO and these agencies could be formalized through interagency agreements. Electronic information transferred to GPO for the FDLP would also be transferred to NARA at the appropriate time and in formats acceptable to NARA. It should be noted that this transfer would not relieve the publishing agency of its archival responsibility without a change in the law or regulations.

Benefits

- More electronic information is brought "officially" into the FDLP.
- Public access is improved because the GPO Locator provides a centralized mechanism for finding information on multiple Government Web sites.
- Extended access to information through the FDLP is maintained.

- Providing its electronic information to GPO for FDLP distribution would also fulfill an agency's obligation to NARA. GPO will be responsible for reformatting the data so that it will be acceptable for archiving and for transferring the information to NARA at the appropriate time.

Disadvantages/Problems

- Depository libraries that currently have little or no Web access cannot access Government information on these sites. This disadvantage will be reduced over time as the libraries upgrade their equipment and Internet access.
- The willingness of GPO to provide permanent access is not an incentive for agencies to convert from print to electronic format, although it does have the potential to bring additional electronic information into the FDLP.

ISSUES TO BE ADDRESSED

Standard Formats for Electronic Information

Standard formats has been a key issue for a number of years. Now is an excellent time to address it. If standard formats are implemented, expenditures could be reduced in preparation, printing, distribution, storage and retrieval, archiving, and use of Government information.

Need for Central Management of Public Access and Dissemination

The Government Printing Office is an important cog in the Federal Government procurement system. GPO has been very effective in procuring a myriad of crosscutting services far beyond simple printing. This is accomplished at the best price and quality level available in the United States. In the Government printing community there is a heavy reliance on the expertise and guidance of GPO staff in addition to printing procurement.

While the information management community may be decentralized, there should remain a central focal point and coordinated means for assuring public access to government information. As stated earlier, GPO is the recommended procurement source for Federal printing and is the coordinator for the FDLP. It is reasonable to assume that any program should only enhance what GPO now provides better than any other source. The natural progression is to begin making GPO the Federal Government's information manager for public dissemination of Government publications.

Education and Outreach

- Many agency IRM and program managers are unaware of the FDLP and their obligations to the program under 44 U.S.C. Chapter 19 and OMB Circular A-130. Some of those who are aware do not recognize the value of the program in providing public access to their information. To influence these managers it may be necessary to implement an outreach program highlighting what the FDLP is, the role it plays in providing public access to Government information, and agency obligations to the FDLP. The difficulty will be in locating those people within an agency who need to be contacted as responsibilities for dissemination of information becomes increasingly decentralized.

Attachment D-5

**Task 6: Evaluation of Current Laws Governing the
Federal Depository Library Program and Recommendation of Legislative Changes**

Attachment D-5

Task 6: Evaluation of current laws governing the FDLP and recommendation of any legislative changes necessary for a successful transition to a more electronic program

Changes to Chapter 19, Title 44, U.S. Code would facilitate the transition to a more electronic Federal Depository Library Program (FDLP). The changes discussed below support Part III, Principles for Federal Government Information, and Part IV, Mission and Goals for the Federal Depository Library Program, of this Study.

1. Scope of Information in the FDLP

a. Electronic Information to be Included

Electronic Federal Government information must be included in the FDLP, in order to provide the broadest possible public access. The current definition of "government publication" in Section 1902 of Title 44, U.S.C. needs to be broadened to include, without question, electronic information. The following language, which would substitute new definitions, is one way to accomplish this:

"Government information" means Government publications, or other Government information products, regardless of form or format, created or compiled by employees of a Government agency, or at Government expense, or as required by law.

"Government information product" means a discrete set of Government information, either conveyed in a tangible physical format including electronic media, or made publicly accessible via a Government electronic information service.

"Government electronic information service" means the system or method by which an agency or its authorized agent provides public access to Government information products via a telecommunications network.

The purpose of this language is to broaden the scope of the chapter to include information in electronic formats, whether published as a tangible product or made accessible via an electronic online service.

b. "Cooperative Publications" Exclusion

Another consensus emerged from the Task 6 participants, as well as the broader Study Working Group. This was that the Section 1903 exclusion from the FDLP of "so-called cooperative publications which must necessarily be sold in order to be self-sustaining" had, at times, resulted in information of public interest being kept out of the FDLP. In the view of the Task 6 participants this exclusion should be eliminated.

c. Fee-based Electronic Services

The general public, through the FDLP, should have no-fee access to all Government information meeting FDLP requirements. However, attaining this goal is often at odds with statutory or other requirements on agencies that fees be charged for access to their electronic information services. This situation might be resolved in two ways. Through legislative action, agencies could be directed to extend no-fee access to the public through depository libraries. Alternatively, funds appropriated to the Superintendent of Documents for the FDLP could be used to purchase depository library access from the originating agencies.

d. How Information Is Made Available

The decentralized characteristics of the electronic information environment make it impractical for any single organization to obtain all electronic information for access and preservation, nor is such an approach cost-effective. Both Study Working Group and Task 6 participants envision that GPO would make information available to depository libraries and the public in various ways. The centralized acquisition and distribution of tangible products would continue, as this activity has significant value to the depository library community. Purely electronic Government information, however, could be accessible from a variety of Government electronic information services, including the GPO Access services, services operated by the originating agencies or other entities acting as their agents, or by secondary disseminators. Language such as the following would clarify this approach:

The Superintendent of Documents shall make tangible products available through distribution to program libraries and shall direct program libraries and the general public to Government information products available via Government electronic information services.

e. Obtaining Copies of Products not Produced through GPO

Government information products have sometimes not been included in the FDLP because they were not produced or procured through the Government Printing Office. The Task 6 participants agreed that the Superintendent of Documents should be authorized to use appropriated funds to obtain, on an incremental cost basis, copies of tangible electronic products, particularly CD-ROM titles, which are produced or procured elsewhere than through GPO.

Agencies shall notify the Superintendent of Documents of tangible electronic products which are to be produced or procured elsewhere than through the Government Printing Office and establish procedures whereby the Superintendent of Documents may obtain copies on an incremental cost basis.

f. Electronic Source Files

As nearly all Government information products exist in electronic form at some point in their life cycle, most Study participants concurred that the most cost-effective method of incorporating additional electronic information products into the FDLP was to obtain that source data from the originating agency. The following language provides one approach to obtaining these source data files:

Upon request of the Superintendent of Documents, agencies shall provide the Superintendent of Documents with electronic source data files of any Government information products falling within the scope of this Section.

2. Permanent Public Access to Government Information

Historically, the FDLP, through the mechanism of the regional depository libraries, has guaranteed permanent preservation of and access to tangible Government information products. With respect to purely electronic Government information, there is no parallel mechanism to ensure that this information is "archived" for permanent public access.

Nearly all of the Study participants and FDLP stakeholders have raised issues concerned with preserving electronic Government information for permanent public access. The Task 6 participants agreed that the FDLP should coordinate the development of a distributed system including the publishing agencies, GPO, the National Archives and Records Administration (NARA), and depository libraries for such purposes. The following language is one way to accomplish this:

The Superintendent of Documents will coordinate with issuing agencies, the National Archives and Records Service, and with regional and other program libraries to establish a system so that Government information products available via Government electronic information services will be maintained permanently for program library and general public access. This system will utilize as one component the electronic storage facility established by the Superintendent of Documents under the provisions of Section 4101, Chapter 41, Title 44, U.S. Code.

3. Requirements for Depository Libraries

a. Public Service

Depository libraries are expected to provide no-fee public access to FDLP information. For tangible products, all but the regional depositories may select what products they wish to receive and add to their collections, based on their assessment of local needs. For purely electronic Government information, depositories are expected to provide no-fee public access to all such information provided under the aegis of the FDLP. FDLP electronic information may be accessible from GPO Access, or the SOD locator may direct and link users to another agency's electronic information service.

The Task 6 participants agreed that the commitment to provide public service should be emphasized as a responsibility of any depository library. Language such as the following, which expands upon Section 1909, could clarify this point:

*Only a library able to properly maintain **and provide public access to** Government information and located in an area where it can best serve the public need, and within an area not already adequately served by existing program libraries may be designated ...*

b. Retention and Disposal of Government Information

In addition, a need to clarify and update the retention requirements on both regional and selective depository libraries was identified. This could be accomplished, in part, by removing the specific five-year retention requirement from the statute, and allowing libraries to dispose of Government information as authorized under guidelines to be issued by the Superintendent of Documents; and in part by the language such as the following:

Regional program libraries shall permanently retain at least one copy of all Government information products originally distributed either in printed, microform, or tangible electronic form, except superseded publications or those issued later in bound form which may be discarded. Other Program libraries may dispose of government information products as authorized by the Superintendent of Documents.

Such language would clarify that the regional depository libraries' responsibilities for retaining copies of tangible products, e.g. books, maps, CD-ROM titles, etc., are not automatically extended to electronic files made accessible via a Government electronic information service. Instead, regional depositories could elect to participate in the development of a distributed system for permanently preserving Government electronic information.

4. Notification

In order for the FDLP to function effectively in a decentralized electronic environment timely notice is required so that GPO personnel can obtain and/or convert data, and provide locator services. A requirement is needed that publishing components notify the Superintendent of Documents at such time as they initiate, substantially modify, or terminate Government information products. The following language is one way to accomplish this:

Agencies shall notify the Superintendent of Documents of their intent to initiate any Government information product and shall notify the Superintendent of Documents at such time as they substantially modify, or terminate a product available via a Government electronic information service.

5. Compliance Issues

There was a consensus among Task 6 participants that agency compliance with the FDLP requirements of Title 44 has long been an issue. Historically, Section 1903, which authorizes the SOD to pay for copies of products produced or procured through GPO, while the agencies were required to bear the cost of FDLP copies produced other than through GPO, has acted as an incentive for agencies to participate in the Program. Nevertheless, there were numerous instances where agencies failed to comply with the Title 44 requirements, and the Section 1903 "incentive" is not as effective in its application to information published via a Government electronic information service. Regardless of the reasons for agency non-compliance, the result is that Government information is unavailable to the public through the FDLP. A consensus emerged among Task 6 participants that statutory language is needed to improve Program compliance among the agencies; however, there was no specific language proposed.

6. Cataloging and Locator Services

Incorporating electronic information into the FDLP poses new challenges to users trying to find what they want. The Task 6 participants perceived a need to coordinate the traditional SOD cataloging activity, covering tangible products, with the developing suite of locator services directing users to information available from Government electronic information services. The following language, which would replace the existing Sections 1710 and 1711, is one way to approach this:

The Superintendent of Documents shall provide cataloging and locator services which will direct program libraries and the general public to Government information products.

The Superintendent of Documents shall create a comprehensive and timely catalog of tangible Government information products which will be accessible to program libraries and the general public. The Public Printer and the head of each agency shall immediately deliver to the Superintendent of Documents a copy of every tangible Government information product falling within the scope of Chapter 19 of this Title.

The Superintendent of Documents shall create an electronic directory of Government information products available via Government electronic information services as required by Section 4101 of Chapter 41, of this Title, which will identify, describe, and dynamically link users to information products available via Government electronic information services. When an agency makes an information product available only via a Government electronic information service, the agency shall immediately furnish information about that product to the Superintendent of Documents to enable the Superintendent of Documents to provide locator services.

7. Redescribing the Program to Reflect a Changing Environment

A consensus developed among Task 6 participants that the Program should be redescribed to be more reflective of the electronic information environment. "Depository" was viewed as strongly linked to the old paradigm of shipping physical products, and did not adequately express the goal of public access to public Government information. To more fully express this aspect of the Program, and to emphasize the affirmative role of agencies to make their information available, the Task 6 participants suggested that the title of Chapter 19 could be changed to: "Public Access to Government Information through Libraries: The Federal Information Dissemination and Access Program."

New definitions such as the following would support such a change:

The "Federal Information Dissemination and Access Program" is a nationwide geographically-dispersed system, administered by the Superintendent of Documents, consisting of program libraries acting in partnership with the United States Government, established within this Chapter for the purpose of enabling the general public to have local access to Federal Government information at no cost.

This introduced a possible new term, "program library," which would replace the former "depository library," and might be defined as:

"Program library" means a depository or other library designated under the provisions of Chapter 19 which maintains tangible Government information products for use by the general public, offers professional assistance in locating and using Government information, and provides local capability for the general public to access Government electronic information services.

Attachment D-6

**Task 7: Survey Federal Agencies to Identify CD-ROM Titles
Not Currently Included in the Federal Depository Library Program**

TASK 7: Survey Federal agencies concerning CD-ROM titles which they publish that are not currently included in the Federal Depository Library Program (FDLP) to determine reasons for non-participation.

METHODOLOGY

Contacting Federal publishers concerning their CD-ROM publishing has been a shared effort by the Office of Management and Budget (OMB) and the Government Printing Office (GPO). OMB requested information from the executive branch publishing agencies, and GPO queried selected legislative and judicial branch publishers. Respondents were asked to include detailed information about their CD-ROM publishing activities since FY 1993 and to provide reasons for not including specific CD-ROM titles in the FDLP. The OMB memorandum was done in conjunction with their effort to gather data for the National Information Infrastructure initiative.

This task group hoped to identify specific reasons for participation and non-participation in the FDLP, in order to learn what motivates agencies. The responses were not sufficient to support a statistical analysis, but some general conclusions can be drawn from the responses.

These results are based on replies from 24 Executive branch agencies, 2 Legislative branch agencies, and 2 Judicial branch organizations. Survey letters were sent to 35 Executive agencies, including all cabinet level agencies. All cabinet level agencies except the Department State responded, although State does have at least one CD-ROM title that is in the FDLP. However, the responses from many cabinet level agencies were obviously incomplete. For example, both the Bureau of Economic Analysis (BE) and Bureau of the Census responded to the survey, but other Commerce agencies such as NTIS and NOAA which have major CD-ROM publishing programs did not respond.

In order to gain additional perspective on the agency responses, GPO gathered additional data from two sources. Records on CD-ROM titles in the FDLP were extracted from GPO's Acquisition, Classification, and Shipment Information System (ACSIS) and this information was compared with the CD-ROM titles reported by the agencies, in order to determine if GPO had distributed any CD-ROM titles which agencies reported as not in the FDLP.

GPO staff also reviewed records from the 1995 SIGCAT Compendium, a voluntary listing of CD-ROM titles, most of which are published by Federal Government agencies. Although the Compendium data is not directly comparable to the results from the OMB and GPO survey because of a different time period and other parameters, it did provide another means to assess the agency responses.

SURVEY RESULTS

215 CD-ROM titles were identified in the survey responses. The agency responses identified only 91 (42.3%) as being distributed to depository libraries. An additional 27 titles (12.6%) were identified by GPO as being included in the FDLP, even though the publishing agencies stated that those title were not included. Therefore, altogether, 118 (54.8%) of the 215 titles identified by publishing agencies are in the FDLP.

- Three agencies, the Census Bureau, Department of Health and Human Services (DHHS), and the Department of Education, accounted for 71 (78.0%) of the 91 CD-ROM titles reported by agencies as included in the FDLP. GPO records indicated that another 16 of the titles reported by these three agencies were actually in the FDLP, raising the total to 87 of a possible 118 (73.7%).
- Census reported providing 42 out of 66 CD-ROM titles, or 63.6% of its CD-ROM titles. According to GPO records, Census actually provided 56 of its 66 CD-ROM titles (84.8%).
- DHHS provided 16 out of 25 CD-ROM titles reported, or 64.0%, and GPO's records confirmed this report.
- Education acknowledged providing 13 out of 33 CD-ROM titles reported, or 39.3%. According to GPO records, it actually provided 15 titles (45.5%).
- No reasons for participation in the FDLP were expressed by any of respondents. No reasons for non-participation were provided for 65 of the 117 titles (55.6%) identified by agencies as not included in the FDLP.
- Eight CD-ROM titles not included in the FDLP do have comparable titles in the program in paper, although it was not possible to determine if the content is identical.
- The two most frequent reasons given for non-participation were that the software license imposes a limit on the number of copies distributed (21 responses) and that title was produced or is available through the National Technical Information Service (NTIS) (14 responses). Other reasons include: forthcoming title (4); commercially developed and distributed (4); public availability under review (4); contains restricted or confidential information (2); distributed by another agency (1); and an offer to arrange to include the title in the FDLP (1). Several responses included more than one reason.
- Judiciary and legislative branch responses indicated little to no CD-ROM publishing activities to date. However, both the Supreme Court and the Administrative Office of the U.S. Courts mentioned an interest in future CD-ROM development. The Library of Congress response included a list of eleven CD-ROM titles, all of which were bibliographic in nature and all of which were excluded from the program as cooperative publications and/or due to licensing restrictions. LC did not report any of its American Memory discs or other CD-ROM titles.

| Agency Name | Number of Titles Reported | Number of Titles in the FDLP | Number of Titles Reported in 1995 SIGCAT CD-ROM Compendium |
|--------------------|---------------------------------|------------------------------------|---|
| <hr/> | | | |
| EXECUTIVE | | Agency Reported | GPO Confirmed |
| Agriculture | 13 | 0 | 0 |
| Commerce/BEA | 2 | 2 | 2 |
| Commerce/Census | 66 | 42 | 56 |
| Defense | 8 | 3 | 3 |
| Education | 33 | 13 | 15 |
| Energy | 5 | 1 | 3 |
| EPA | 5 | 0 | 3 |
| FCC | 11 | 0 | 0 |
| FDIC | 1 | 0 | 0 |
| Health | 25 | 16 | 16 |
| HUD | 0 | 0 | 0 |
| Interior/USGS | 13 | 1 | 8 |
| Justice | 1 | 1 | 1 |
| Labor | 6 | 3 | 4 |
| NARA | 1 | 1 | 1 |
| NASA | 0 | 0 | 0 |
| NRC | 0 | 0 | 0 |
| NSF | 1 | 0 | 0 |
| OMB | 0 | 0 | 0 |
| SBA | 0 | 0 | 0 |
| Transportation | 9 | 5 | 5 |
| Treasury/IRS | 2 | 2 | 2 |
| USIA | 0 | 0 | 0 |
| Veterans | 2 | 1 | 1 |
| JUDICIAL | | | |
| Supreme Court | 0 | 0 | 0 |
| Admin. Office | 0 | 0 | 0 |
| LEGISLATIVE | | | |
| GAO | 0 | 0 | 0 |
| LC | 11 | 0 | 0 |
| TOTAL | 215 | 91 | 118 |
| | | | 351 |

ADDITIONAL OBSERVATIONS

Some Executive agencies with significant CD-ROM publishing activities did not respond to the survey, or responded that they have no CD-ROM titles when other information suggests that have many. For example, a search of the 1995 SIGCAT CD-ROM Compendium database identified 107 CD-ROM titles issued by NASA, which reported no CD-ROM titles in response to the survey. A similar search identified 104 titles from NOAA and 54 from NIST, although neither agency responded to the survey.

In discussions not related to this Study Task, agencies have identified other reasons for not including their CD-ROM titles in the FDLP. These reasons included a lack of awareness of the Program or its benefits; miscellaneous software licensing issues; or that their discs were cooperative publications which must be sold in order to be self-sustaining, as defined in 44 U.S.C. §1903.

ISSUES TO BE ADDRESSED

Agency Responsibilities for Dissemination Through the FDLP

Some agencies believe that making their products available through NTIS satisfies their public dissemination obligations, although OMB Circular A-130 states that it is good public policy to include agency electronic information products in the FDLP. There is unresolved disagreement between various Program stakeholders as to whether current law requires CD-ROM titles to be in the FDLP. This issue hinges on the definition of a publication codified in 44 U.S.C. §1901 and §1902.

Software Licensing

Restrictions arising from software licensing arrangements affect not only the cost, but the availability of CD-ROM products. All information products provided through the FDLP, including CD-ROM titles, remain the property of the Government, so FDLP copies can fall within contractual language that restricts the software to "government use." Agencies may need to consider FDLP requirements and include appropriate language in their contracts in order for their discs to be included in the FDLP. GPO can (and has) contracted for software licenses for sales and depository copies when agency licenses do not cover GPO dissemination.

Awareness of the FDLP/Communications

Since CD-ROM titles may be produced by agency personnel unfamiliar with traditional printing arrangements there can be a lack of communication within the publishing agency which results in discs not being included in the FDLP. In addition, all relevant personnel within the agency may not be aware of how their information products reach the public. Thus, even agencies like Census and Education that work closely with GPO and are committed to distributing their information through the FDLP don't always know which of their titles are and are not in the program. A program of improved communication or outreach to agencies may be necessary to ameliorate this situation.

Attachment D-7

Task 8A: Case Study on Congressional Bills

TASK 8A: Evaluate the costs and benefits involved in converting Congressional bills and resolutions to electronic formats for distribution through the Federal Depository Library Program.

BACKGROUND

The legislative agenda of each Congress determines the number of bills introduced. Therefore, although it is possible to determine the average number of bills per session this average does not accurately predict the number of bills that will be produced in any particular session. For the 102nd and 103rd Congressional Sessions, the total number of bills and resolutions simple, joint and concurrent was 24,543. All published versions of bills are available electronically via Internet or asynchronous connection through GPO Access. Files are available in both ASCII and Adobe Acrobat Portable Document Format (PDF). PDF files provide users with an exact image of the typeset page. With an Adobe Acrobat Reader, available at no cost from GPO or Adobe, users can view, navigate and print Congressional bills exactly as they appear in the original typeset version, including all fonts, graphics and formats.

FEDERAL DEPOSITORY LIBRARY DISTRIBUTION

Congressional bills on microfiche are selected by 859 depository libraries. This item selection includes House and Senate Bills, Resolutions, Joint Resolutions and Concurrent Resolutions on microfiche. The cost to the FDLP per session of Congress for the production and distribution of Congressional bills and resolutions on microfiche is approximately \$94,940.

Prior to December 1995, when free public access to the GPO Access databases was announced, the electronic bills were selected by 544 depository libraries. WAIS access to Congressional bills, joint, concurrent and simple resolutions was selected by 199 libraries, and SWAIS access was selected by 257 libraries. Both types of access were selected by 88 libraries. However, these figures do not represent the total number of depository subscriptions to the electronic services because each depository library could register for as many as 10 subscriptions while being counted as having made only a single item selection.

Currently, depository libraries may select Congressional bills and resolutions in both microfiche and electronic formats. Under the policies laid out in the Transition Plan for the FDLP, this will no longer be an option for depository libraries as all dual distribution will be discontinued. The Electronic Federal Depository Library Program Transition Plan, FY 1996-FY 1998 specifies that:

"Redundant dissemination of content indifferent formats; e.g. paper and microfiche, or microfiche and electronic, or CD-ROM and on-line, will be eliminated due to the limited availability of funds. Once the transition to an electronic FDLP is complete, only the "core" paper titles will represent potential duplicate distribution, as their content may also be available electronically."

DISSEMINATION ALTERNATIVES

Alternative A

Eliminate all microfiche distribution to depository libraries and make Congressional bills and resolutions strictly available online through the WAIS server. The PDF files for the bills could also be mounted for FTP

download. This would allow libraries who only have access to the bills database through SWAIS to obtain the more useful PDF files.

Benefits

- Timely delivery of the information.
- \$94,940 currently spent for microfiche distribution is saved, although this is offset by increased depository usage of the WAIS server.
- No new product development is required.
- PDF files provide exact images of the typeset bills and can be searched, printed, and cut and pasted into other documents. Therefore the information is more useful in this format than it would be on microfiche.

Disadvantages/Problems

- Distribution costs will be higher than for microfiche. It is estimated that 11.41% of the WAIS server currently is being used for the bills database. Based upon this figure, the estimated percentage of WAIS costs that can be attributed to the Bills database is \$138,000 per year. This is \$43,060 more than distribution costs for microfiche. [However, as the bills currently are distributed in both microfiche and electronic format, moving solely to electronic will reduce costs overall by eliminating dual distribution.]
- The number of depository libraries that will be able to access this information will decline. Preliminary results from the 1995 Biennial Survey indicate less than 50% of depository libraries have computer terminals with Internet access available for public use. Of those libraries who do not provide Internet access for the public, 169 (12.3%) said they have no plans to obtain it. The percentages of depository libraries with Internet access for public patrons are as follows:

| | |
|--------------------------------|-------|
| E-mail | 21.4% |
| Telnet | 38.9% |
| FTP | 30.8% |
| World Wide Web (graphical) | 37.6% |
| World Wide Web (non-graphical) | 27.3% |

The revised minimum technical guidelines for depository libraries (January 1995) recommend that libraries try to establish a SLIP/PPP Internet connection. The Depository Library Council has recommended that these guidelines be made requirements effective October 1, 1996.

As more Congressional sessions are added to the WAIS server it will be necessary to remove older, less frequently used bills. If depository access to historical files is to be ensured, a less costly and longer term distribution method will be needed to supplement online access to the bills. This may mean production of a CD-ROM or mounting of the PDF and ASCII files for FTP downloading after a predetermined period of time.

Alternative B

Eliminate microfiche distribution of the Congressional bills and resolutions in favor of a monthly cumulative CD-ROM containing the PDF files. Depository libraries still would be able to access the online service. Producing and distributing 12 discs a year would cost approximately \$60,908. This figure can be broken down as follows:

| | |
|---|-----------|
| Mastering of twelve discs per year | \$ 21,000 |
| Replication of 859 discs plus 20 claims copies @ \$3.50 distributed monthly | \$ 36,918 |
| Postage (estimated \$0.29 per disc) | \$ 2,990 |
| Total cost of discs distributed monthly | \$ 60,908 |

Benefits

- Total costs savings of \$34,032 over the current cost for microfiche distribution of the same material.
- Depository libraries are better equipped to handle CD-ROM than they are to handle online services. According to preliminary results from the 1995 Biennial Survey, 83.1% of all depository libraries had CD-ROM capability at a stand alone workstation. In addition, the revised technical guidelines for depository libraries recommend libraries acquire a single or multiple platter CD-ROM drive compatible with the ISO 9660 standard.
- CD-ROM is a good format for extended access. The estimated life of a CD-ROM is 30 years or more.
- The PDF files provide exact images of the typeset bills and can be searched, printed, and cut and pasted into other documents. Therefore the information is much more useful in this format than it would be on microfiche.

Disadvantages/Problems

- Although timeliness of a monthly CD-ROM might be equivalent to that of microfiche, it does not compare with the speed at which information could be made available through an online service.

ISSUES TO BE ADDRESSED

Technical Capabilities of Depository Libraries

Information currently available concerning the technical capabilities of depository libraries and the technical expertise of both libraries and their patrons is not substantive.

As more information in the FDLP is converted to electronic formats and discontinued in paper and/or microfiche, the number of, and cost for, computer terminals, CD-ROM drives, printers, and other equipment and software needed to access Government information also becomes increasingly relevant. Preliminary estimates from the 1995 Biennial Survey of depository libraries indicate that almost 7% would withdraw or consider withdrawing from the program if it became exclusively electronic.

Attachment D-8

Task 8B: Case Study on the Congressional Serial Set

TASK 8B: Evaluate the costs and benefits involved in converting Congressional Documents and Reports to electronic format for distribution through the Federal Depository Library Program, even though currently a substantial amount of the source data is not available to GPO in machine readable form.

METHODOLOGY

The "Report of the Serial Set Study Group" was submitted to the Public Printer on October 7, 1994. That report identified the then current costs of producing the Serial Set (Documents and Reports) and projected costs for four dissemination alternatives, including several electronic options. This report re-examines those options in light of current GPO technical capabilities and refined cost data. [Note: for the purpose of this task, the focus will be on distribution to depository libraries, not on International Exchange (16) or posterity (22) libraries.]

BACKGROUND

From June 13, 1994 to October 7, 1994, the Serial Set Study Group examined alternate formats and cost reduction strategies for issuing the Serial Set (Documents and Reports). The study group consisted of representatives from the Government Printing Office (GPO), the Joint Committee on Printing (JCP), and the library community. The final report from the Study Group evaluated the benefits and drawbacks of various dissemination alternatives.

Since the 1994 Report of the Serial Set Study Group, new cost data has come to light. GPO's CD-ROM production capability and the cost to produce discs is now very clearly defined, and shows a significant reduction over the cost estimates projected in the 1994 Report. The 1994 Report based CD-ROM costs on the estimate of producing the test disc for the Congressional Record CD-ROM Pilot Project. The cost estimate to master the disc for that project was \$212,900. More than half of that cost, \$130,000, was to write and test software. Current GPO CD-ROM production costs are much lower.

Reports currently are received from Congress in about 80% machine readable format, and 20% camera copy. Documents are more of a problem; only 20% are received from Congress in machine readable format and 80% in camera copy. It is necessary either to obtain from Congress or convert the information received in camera copy to machine readable form by scanning it using Adobe Acrobat Capture software. If the Adobe software does not recognize portions of the document, it converts what it cannot read to an image. The images are non-searchable, which makes the entire document less useful. In addition, the current resolution of these images is only 300 dots per inch (d.p.i.), an inadequate resolution for effective use. Scanning will remain necessary unless arrangements can be made to receive all of this information in machine readable format at the start.

FEDERAL DEPOSITORY LIBRARY DISSEMINATION

Every depository is eligible to receive both slip publications and the bound Serial Set in either paper and/or microfiche format. Depository libraries that select the Serial Set in microfiche (755) receive a paper copy of material too graphically intensive (i.e. four color process) to be practical for conversion to microfiche. The 1994 Report of the Serial Set Study Group indicated that for the 101st Congress, 463 libraries selected the bound Serial Set and the slips in paper format (as well as 16 International Exchange and 22 posterity libraries). The current cost of dissemination per Session, based on the actual costs for the 101st

Congress, as reported in the 1994 Report of the Serial Set Study Group, is \$1,567,000. Most Documents and Reports also are now available online through GPO Access.

DISSEMINATION ALTERNATIVES

Alternative A

The 1994 Study Group recommended that regional libraries receive the bound Serial Set in paper format and Documents and Reports in a CD-ROM version. Selective libraries could choose online access to the slips in lieu of either paper or microfiche. They also would be able to select either the bound Serial Set in paper or the Documents and Reports CD-ROM.

Benefits

- Depository libraries have a wide variety of formats to select.
- A phased-in change would minimize the effects of electronic conversion on depository libraries.

Disadvantages/Problems

- Costs are difficult to quantify, but will be higher under this phased-in approach.
- The discs will contain files that are not entirely searchable. This will be a continuing problem until GPO can negotiate with Congress to receive all Documents and Reports in machine readable format or scan and convert camera copy to machine readable format.

Alternative B

Paper copies of the bound Serial Set would go to regional libraries and one library in each state without a regional (62 copies, down from current 425).

Libraries not eligible for paper copies would be able to select the CD-ROM set. Reports and Documents discs would be issued quarterly. Each CD-ROM would cumulate for the session. The fourth CD-ROM would be a final version at the end of the session. All depository libraries also would have the option of accessing Documents and Reports online from GPO Access.

Benefits

- Costs for CD-ROM and limited paper distribution would be \$391,996, a total cost savings of \$1,070,004 from current costs for paper distribution to selective depository libraries.
- Depository access to Documents and Reports will be enhanced if arrangements can be made for GPO to receive electronic copies in a format that allows rapid conversion and upload.

Disadvantages/Problems

- Some materials are so graphically intensive or otherwise structured so as to make conversion to electronic formats difficult. Current efforts to place Documents and Reports online are leaving off some graphically intensive items. Eventually all Documents and Reports will be added to the online service, but it is taking longer to provide online access with these type of publications. For

example, as of October 25, 1995, the following Documents and Reports were missing from GPO Access for the 104th Congress:

| | |
|--------------------|---------------------|
| Senate Reports: | 3 of 153 or 1.96% |
| House Reports: | 2 of 272 or 0.74% |
| House Documents: | 17 of 119 or 14.29% |
| Senate Documents | 4 of 7 or 57.14% |
| Treaty Documents: | 2 of 21 or 4.76% |
| Executive Reports: | 9 of 9 or 100% |

- The CD-ROM set will contain files that are not entirely searchable unless all of the information is submitted initially in machine readable form.
- It is very difficult to ascertain conversion costs for the current effort to place Documents and Reports online, since all GPO WAIS work, except GAO Reports, is charged to one cost "jacket." However, GPO's production staff indicated that putting Documents and Reports online is consuming a total of 6 hours a day for a 5 day work week.

Alternative C

The same provisions as outlined in Alternative B would apply under this alternative. However, GPO would provide paper copies for any Documents and Reports too graphically intensive to practically convert to electronic format. To determine the impact of continuing this policy, the production records for the 100th and 101st Congresses were examined. Of the Documents and Reports issued 11 of 115 (9.57%) of the entire 101st Congress, and 13 of 154 (8.44%) of the 100th Congress respectively were not microfilmed. GPO sent microfiche dividers for those publications indicating that the material would not be available on microfiche, and depository libraries subsequently received paper copies of those missing microfiche publications.

Benefits

- Libraries would receive paper copies of Documents and Reports too graphically intensive to convert to electronic format.

Disadvantages/Problems

- Partial distribution in paper would cost \$78,194 more than distribution solely in electronic format. This still results in a total savings of \$990,809 over current distribution costs.

ISSUES TO BE ADDRESSED

Depository Library Capabilities

The capability of depository libraries to deal with electronic formats of Documents and Reports and other electronic publications in the FDLP should be studied in depth before converting a significant portion of depository material to electronic format.

Cost Shifting to Depository Libraries

Hardware and software needed to use electronic information is costly for depository libraries. In addition, patrons usually only have a limited number of workstations available to access electronic information, while different copies of paper and microfiche material can be used by many patrons simultaneously. With information in electronic format, depository libraries do save the processing and storing costs associated with traditional formats.

Continued Access to Information

Depository libraries are concerned about continued availability of depository publications. Paper and microfiche formats have life spans that can be reasonably predicted. Electronic formats, in rapidly changing formats, generally have less clearly defined life spans.

Need for Machine Readable Information

GPO must explore methods of obtaining all Documents and Reports from Congress in machine readable form in order to improve the quality and usefulness of the electronic files, or establish a cost effective means to convert camera copy to electronic format.

Attachment D-9

Task 8C: Case Study on the Department of Energy (DOE) Research Reports

TASK 8C: Determine the costs and the impact on public access to the Department of Energy (DOE) technical reports through the FDLP as the Office of Scientific and Technical Information (OSTI) moves forward with its efforts to convert these reports from microfiche to electronic format.

BACKGROUND

The Department of Energy's Office of Scientific and Technical Information (DOE/OSTI) is in the process of making the transition from microfiche to electronic dissemination. DOE/OSTI intends to discontinue the routine production of its technical reports on microfiche after FY 1996, and migrate the content entirely to electronic media.

The DOE/OSTI relationship to their laboratories' information has been described as "centralized management of a decentralized environment." DOE/OSTI is being pushed towards making the conversion to electronic by their laboratories and contractors, who author reports electronically and want to submit them that way. Ultimately, DOE/OSTI expects to receive machine-readable data from contractors instead of printed reports. In the meantime, documents submitted in print will be scanned to TIFF Group 4 (CCITT Standard) format. The image files for the reports will be linked to announcement records and made available on the DOE/OSTI Web site. A CD-ROM set containing the scanned reports could be produced if demand warrants. No cost recovery structure or free dissemination policy has yet been established, but DOE/OSTI may have to charge to recover costs.

DOE/OSTI will retain the capability to produce microfiche from hard copy. However, over a period of time they will try to wean their customers to an electronic replacement. If a report comes to DOE/OSTI only in electronic format, it only will be available to customers in electronic format. The DOE/OSTI schedule for conversion has fallen slightly behind. This has necessitated the continued production of microfiche through FY 1996. The delay in the transition can be attributed to slower than expected development of technical capabilities and indecision concerning how public access to the reports on the Web site will be handled.

FEDERAL DEPOSITORY LIBRARY DISTRIBUTION

GPO and DOE/OSTI entered into an interagency agreement (IA) in 1984. The purpose of the agreement, which has been extended through September 30, 1997, is to provide Federal Depository Libraries with distribution services for microfiche copies of DOE publications (reports). Approximately 225 depository libraries receive DOE reports from DOE/OSTI. An average DOE report title is selected by 135 depositories.

Funding for the agreement is a shared responsibility of GPO and DOE/OSTI. Following Section 1903 of Title 44, U.S.C., GPO pays only the distribution costs for these publications because they are not produced or procured through GPO. DOE/OSTI is reimbursed by GPO for distribution costs from the Salaries and Expense Appropriation, which funds the operation of the Federal Depository Library Program (FDLP). DOE/OSTI absorbs the reproduction costs of the copies of DOE reports they produce in microfiche format for depository libraries.

The basic responsibilities of each agency under the IA are as follows:

DOE/OSTI:

- 1) Distributes DOE reports in microfiche to the Federal Depository Libraries using distribution profiles specified by GPO based on the selections of the libraries.
- 2) Fulfills depository library claims for missing publication(s).
- 3) Makes shipments to depositories at the most economical rate for each shipment.
- 4) Provides announcements, abstracts and indexing services for these reports, through both print and online media. (GPO does not catalog these publications or list them in the Monthly Catalog.)

GPO:

- 1) Pays the shipping cost for DOE publications.
- 2) Reimburses the negotiated cost for distribution and handling.
- 3) Provides to DOE/OSTI mailing lists of depository libraries indicating which categories of reports the libraries are to receive.

The following statistical and cost data is taken from fiscal years 1993 through 1995. For each fiscal year, the total cost budgeted for distribution of DOE microfiche, and the number of titles and copies distributed is shown.

| FY | Amount GPO Reimburses DOE/OSTI | Unique Reports | Avg No. Libraries Selecting A Title | Copies Shipped | GPO's Cost Per Copy |
|-------------|---|---------------------------|--|---------------------------|------------------------------------|
| 1993 | \$146,000 | 13,900 | 147 | 2,043,963 | \$0.139 |
| 1994 | \$181,433 | 15,365 | 145 | 2,231,929 | \$0.123 |
| 1995 | \$196,208 | 17,117 | 135 | 2,317,335 | \$0.118 |

DOE reports produced in microfiche will continue to be available to depositories throughout FY 1996. After the transition to electronic format is complete, DOE/OSTI is committed to providing access to DOE reports free of charge to depository libraries regardless of any policy decision they make concerning general public access.

DISSEMINATION ALTERNATIVES

Alternative A

DOE/OSTI allows unlimited free access to depository libraries through the reports Web site. No microfiche, hard copy, or CD-ROM will be available through the FDLP.

Benefits

- Results in a total projected cost saving to the Government of about \$500,000 annually; \$200,000 that GPO formerly spent on microfiche distribution, and \$300,000 that DOE/OSTI formerly spent on microfiche production for depository libraries. Overall, DOE/OSTI expects to realize significant cost-savings from electronic dissemination, but the total amount of the savings is not quantified at this time.
- Additional libraries will be able to serve the public with electronic access to the DOE Web site. The selection of DOE reports will be made on a just-in-time, rather than a just-in-case, basis. Libraries will obtain only those titles actually need by their patrons.

Disadvantages/Problems

- Savings to DOE from eliminating microfiche are offset, at least in part, by increased costs such things as additional computer resources and user support. Usage by depository libraries would involve some incremental expense for DOE/OSTI.
- Depository libraries and users who access the DOE Web site through a modem, rather than a full Internet connection, will experience difficulties downloading because of the size of the image files.

Alternative B

DOE/OSTI allows depository access to the reports Web site, with the incremental costs of FDLP usage paid from the GPO S&E appropriation. No microfiche, hard copy, or CD-ROM will be available through the FDLP.

Benefits

- As with Alternative A, additional libraries will be able to serve the public with electronic access to the DOE Web site.
- The selection of DOE reports will be made on a just-in-time, rather than a just-in-case, basis. Libraries will obtain only those titles actually need by their patrons.
- The Government realizes a projected cost savings of \$500,000 through the elimination of all microfiche distribution.

Disadvantages

- Savings to GPO from eliminating microfiche are offset, at least in part, by fees paid to DOE/OSTI for depository access. Unless an estimated or negotiated fee is established, this would be more expensive than Alternative A due to the administrative costs of measuring FDLP usage.
- Depository libraries and users who access the DOE Web site through a modem, rather than a full Internet connection, will experience difficulties downloading because of the size of the image files.

Alternative C

In lieu of online access to the DOE Web site, the information could be made available to depository libraries on CD-ROM titles that are "packed" with reports in random order. GPO would acquire the DOE image files for material suitable for depository distribution and premaster each CD-ROM. In estimating costs, it was assumed that no customized distribution would be available, and that each CD would be sent to 225 libraries, the number which currently select DOE reports. DOE/OSTI estimates 125 reports could be included on each CD-ROM. Assuming issuance of 15,000 reports per year, this would require 120 discs. Costs to the FDLP would include \$40,500 for disc replication and additional costs of approximately \$87,000 per year for mastering (4-6 hours of preparation @ \$75/hr + \$350 master disc = \$725 per disc X 120 discs per year).

Benefits

- Currently depository libraries are better equipped to handle CD-ROM titles than to provide Web access. The 1995 Biennial Survey of Depository Libraries showed that 83% had a stand alone workstation with CD-ROM drive available for their public patrons.
- CD-ROM provides for extended access to the reports in locations throughout the country, without dependence on the DOE site.
- Downloading large image files locally from the CD-ROM set will not be as difficult as access to the DOE Web site through a modem.
- DOE computer resources do not experience additional load from depository library or general public access, since public users may be directed to the FDLP sites.

Disadvantages/Problems

- CD-ROM access will not be as timely as direct online access, but will be reasonable comparable to the current microfiche distribution.
- Additional costs will be incurred by GPO to create and maintain indexes to locate specific reports on the multi-disc set.
- As with the microfiche, depository libraries that do not select the DOE reports on CD-ROM will continue to depend on other depositories for access to individual DOE reports. Users will have to go to one of the depository libraries that has the DOE reports on CD-ROM to use the materials.

ISSUES TO BE ADDRESSED

Extended Term Access

There is no mechanism or policy in place to ensure extended access when dissemination is from an agency Web site. There is no guarantee that if information is removed from a Web site the information will remain available to the FDLP. The establishment of mirror sites operated under authority of the FDLP, either by GPO or by cooperating depository libraries, could provide a mechanism for extended public access.

Agency Missions and Constituencies

Like the site DOE is planning, many Web sites are created in order to serve an agency's primary constituency. Use of these Web sites by the general public through the FDLP may strain an agency's equipment and tie up limited access channels, potentially blocking out constituents for whom the site was created in the first place.

Possible Limitations or Restrictions on Depository Library Access

Depository libraries need to be able to access agency Web sites to serve multiple simultaneous users, particularly in institutions which have a high level of interest in scientific and technical information among their users. Agency services should be designed to permit multiple simultaneous users from the same depository library, without such limitations as a single-user password.

Attachment D-10

Task 8D: Case Study on the Office of Technology Assessment (OTA) Reports

TASK 8D: Identify issues that must be addressed when an agency no longer makes electronic information dissemination products and services available at its Web site, and the site contains information that needs to be remain available to the public through the Federal Depository Library Program (FDLP) and/or transferred to the National Archives and Records Administration (NARA).

BACKGROUND

The use of Web sites as a means to disseminate information is becoming increasingly common among Government agencies. It is also likely that agencies will begin to use their Web sites to distribute information not available in any other format. These Web sites are in essence forms of publication and therefore may be Federal records as defined by 44 U.S.C. §3301. However, the ease in which these sites can be established and modified creates problems for both the Government Printing Office (GPO) and the National Archives and Records Administration (NARA) which share an interest in identifying and preserving the valuable information on these Web sites.

GPO and NARA have dissimilar, but complementary, goals to assure public access for the full life cycle of this information. GPO must address measures that ensure continued short-term access (5 years minimum) for much of the information on the Web sites. NARA focuses narrowly on that portion of the information which has historic value and its goal is to assure preservation of that information. Records schedules can serve as a tool for identifying these sites, but GPO and NARA will have to work together to create ways in which information can be transferred without added burden to publishing agencies.

Issues concerning short and long-term access to information on agency Web sites were brought to the forefront by the closing of the Office of Technology Assessment (OTA) on September 29, 1995. OTA's Web site, OTA Online, included a catalog of all the reports produced by OTA from 1972 to 1995, ASCII text files of the 1994 reports, and ASCII as well as Adobe Acrobat Portable Document Format (PDF) texts of the 1995 reports. The 1995 reports include some reports that will not be formally published. OTA made arrangements to mount information from OTA Online on GPO's Web site. The final transfer to GPO will be sometime in February 1996. Since November 1, 1995, the OTA Web site also has been mirrored by the National Academy of Sciences and the Woodrow Wilson Public and International Affairs at Princeton University.

OTA also has a contract to scan the texts of all their reports dating from 1972 and convert to Acrobat PDF format. The PDF files will be packaged along with much of the information available via OTA Online, and some additional historical material, on a set of five discs. The CD-ROM collection will be distributed to depository libraries and sold through GPO.

FEDERAL DEPOSITORY LIBRARY DISTRIBUTION

Most of the OTA information available in electronic format is available in other formats through the FDLP. The only exceptions are the reports and/or summaries that are still being completed and will not be formally published.

DISSEMINATION ALTERNATIVES

Alternative A

GPO will mount the information from OTA on its own Web site for depository library access. When available, both ASCII and PDF files will be offered. The CD-ROM collection of OTA reports will be distributed to depository libraries upon completion.

Benefits

- Public access to the information is maintained through the FDLP.
- A variety of methods are available for accessing OTA information.
- More depository libraries are equipped with CD-ROM drives than have Web access for the public.

Disadvantages/Problems

- Some OTA information is distributed to depository libraries in three different formats: paper, CD-ROM, and online through the GPO Web site. This is not consistent with the Transition Plan for the FDLP which proposes eliminating all dual distribution.
- GPO incurs additional costs for maintaining the information on its Web site. OTA is responsible only for the costs related to the initial mounting of the information.
- Reports that have been scanned are not entirely searchable. Although the reports will be scanned using Adobe Acrobat Capture, which will convert them to machine readable form, non-recognizable portions will be retained as images. In addition, due to time constraints, the scanned reports will not be reviewed.
- PDF is software dependent and therefore not an acceptable format for long term retention.

Alternative B

The OTA CD-ROM set would be distributed to depository libraries. After a predetermined period of time, OTA information will be removed from the GPO Web site.

Benefits

- Public access to the information is maintained through the FDLP.
- More depository libraries are equipped with CD-ROM drives than have Web access for the public.
- Dual distribution in electronic format is eliminated.

Disadvantages/Problems

- Scanned reports contain non-searchable portions and are not reviewed.

- The CD-ROM set cannot be accepted by NARA for permanent retention because it uses the PDF software-dependent format. [See above.]
- Public access to the reports is available only at or through depository libraries, although as mentioned, there are two other private Web sites that will be providing this information for at least a period of time.

ISSUES TO BE ADDRESSED (FDLP)

Archival Responsibilities

GPO will coordinate with NARA to transfer electronic information from the FDLP to NARA for preservation. If GPO places agency data on a server and makes it available via GPO Access, then the data becomes part of GPO records and GPO will be responsible for its disposition (or transfer) to NARA. If an agency has maintained electronic Government information and GPO points to the information for the FDLP, it will be the legal responsibility of the individual agency to transfer this information to NARA.

GPO and NARA will need to determine whether statutory changes are needed to clarify each agencies' respective roles and responsibilities for permanent access and preservation of electronic information dissemination products and services.

Life-Cycle of Electronic Information Dissemination Products and Services

GPO and NARA will need to define a life-cycle for electronic information dissemination products and services, beginning with the original documents as an electronic file and ending with its disposition. It is NARA's responsibility to determine whether an electronic information dissemination product warrants permanent retention or no longer warrants continued preservation by the Government.

In accordance with the goal of providing permanent access, GPO will assume such costs as data preparation for mounting, maintenance, storage, and ongoing costs to minimize deterioration and assure technological currency.

Format Standards

GPO plans to receive electronic information provided by agencies in any format. However, GPO needs to address the prospect of determining a small number of "recommended standard formats" for agency information, prior to receipt. Also, GPO will need to develop standards for formats of data that have been received and need to be mounted on GPO Access for public availability. It is anticipated that certain electronic source files provided to GPO by agencies will not readily lend themselves to GPO Access in their original formats. Steps may need to be taken to make information received in these types of formats more suitable for p[er]manent access.

GPO will offer this information to NARA once it is determined that usage no longer warrants maintaining the information at a GPO authorized site. This does not imply that GPO will assume the responsibility of converting this information for NARA if the file format used for permanent access through GPO Access is not suitable for the preservation requirements of NARA. It is

expected that GPO may have electronic information for which usage no longer warrants that will not be accepted by NARA because of file formats. GPO and NARA must seek to coordinate their efforts to assure that format standards used by GPO for extended access to electronic information can be converted easily to formats acceptable to NARA.

Software Dependent Information

Some electronic information dissemination products and services produced by agencies in particular formats (such as certain types of spreadsheet files) are embedded with file structures that only have intrinsic value when used with particular software. If this information is converted to another generic format, such as ASCII, it loses value for the user. This poses a concern for GPO, which will need to make this information available via GPO Access, and NARA, which currently will not accept electronic information that is software dependent.

ARCHIVAL BACKGROUND

The OTA Web Site contains two main types of information. 1) **Organizational Structure and Members**, and 2) **Publications**. The organizational structure, lists of **Technology Assessment Board (TAB)** and **Technology Assessment Advisory Council (TAAC)** members, can be found in the annual reports of OTA, which are scheduled for permanent retention under N1-444-94-1. Additional information on the members' work with OTA is scheduled as permanent in **TAB/TAAC Member Files**. The original site also contained information on ongoing projects, how to contact the staff, different online methods of obtaining publications, and links to other government sites. Some of these are no longer appropriate since the agency has ceased to exist.

All of the information in the OTA Web Site has been scheduled in a variety of different records covered by different items in the schedule. However, the schedule does not directly apply to the OTA Web Site. The OTA Web Site can be viewed as another "publication" used by OTA to disseminate information. The existence of the Web Site, as well as its content, provide evidence of the image OTA wanted to portray to the public and the work it accomplished. Even though the information exists, in bits and pieces, among the records of OTA (records covered by the schedule), by bringing this information together, and "packaging" it in a different way, OTA has created a different record that is not covered in the schedule. Thus, the OTA Web Site should be scheduled as an item under the office that manages and maintains the Web Site.

In FY 1995, the National Archives, Center for Electronic Records, scheduled and appraised the ASCII text files of the 1994 and 1995 reports (N1-444-94-1). These ASCII files were appraised as temporary because they do not contain the graphs, charts, and photographs which are integral to the publication, thus diminishing their value. At present, the Center for Electronic Records will not accession files that are dependent on any specific software package. This is referred to as software dependence. This precludes the Center from accessioning the reports produced using ADOBE software. For these reasons, NARA has chosen to maintain the print formats of all the reports produced by OTA. However, NARA will accession the ASCII text file for the **Catalog of Publications, 1972-1995** (N1-444-96-1). This file is used to upload the Catalog onto the OTA Web Site. In the case of OTA electronic information, NARA will accession only the ASCII file used to create the **Catalog of Publications, 1972-1995**. Since OTA is able to send the file in the software independent format specified in 36 CFR 1228.188, OTA will transfer the file directly to NARA, Center for Electronic Records.

NARA also will receive electronic versions of the OTA reports in three different formats: ASCII, Hypertext Markup Language (HTML), and PDF. These files will not be accessioned by the NARA, but will be used to examine technical issues of the different formats. However, NARA may retain for a limited time the HTML and/or PDF format as an extra copy for convenience of reference. HTML files are essentially ASCII files that contain text which is "tagged" using a standardized language. HTML was created as a standardized way to format documents, so that they could be read and interpreted by a variety of different computer platforms. These commands are written using ASCII characters. Any word processing software package can be used to tag a document with HTML commands. However, there are software packages which were developed to "markup" documents with HTML commands. If a tagged document is printed out the HTML commands are visible along with the text of the document. Therefore these files are software independent and can be treated as ASCII files. If needed, PDF files also can be converted to ASCII. Despite the fact that all these files are or can be transferred into software independent files, the original reports contain graphics, which cannot be software independent. PDF files contain graphics and the HTML files contain links to graphics. That is, the graphics "reside" elsewhere, not in the tagged document.

APPRAISAL CONSIDERATIONS

What information is in the Home Page, and which files (and addresses) does it link to? What is the structure/"hierarchy" of the Site?

There is a distinction between a Home Page and a Web Site. A Home Page is the first "page" of a site. It usually contains an introduction or welcome statement. This Home Page provides links to other pages. There are two main types of links: a) links to other files (pages) in the same location, and b) links to other Web sites. A Web Site can be described as the sum of a Home Page and all the files that are linked to it. It is important to determine which file is the Home Page and trace how other pages are linked to the Home Page and other pages. The structure of the page can provide evidence as to what the agency feels its primary mission is and how it wants to portray itself to the general public.

Need to determine criteria/"draw lines" to limit the "links" that will be appraised.

In appraising a Site it is necessary to examine the Home Page and the files that are linked. However, the links to other sites should be appraised with the records of the agencies that maintain those sites. If there is a link to a site which maintains information for the site being appraised, and the agency (of the records being appraised) is responsible for the content, then that particular link should be considered for appraisal. This does not mean that a whole new site is to be appraised along with the first site. A precedent for this can be found in N1-149-95-1P, Item 20.8, VAX Client Server, memo from NSXA to NIR dated January 9, 1995 "[Electronic Photocomposition Division (EPD)] uploads the publications, which they receive on tape or disk. EPD is not responsible for the creation or content of the publications. The individual agencies that send the publications to be are uploaded into the system are responsible for all the data and information. For these reasons, the files in the VAX Client Server should not be appraised as GPO records..."

Which files within a site should be accessioned? Do all the files need to be brought in? Is it adequate to simply document that a particular link contained certain information which can be obtained among the other records of the agency? If links to other sites, document the name and agency which maintained the site?

The determination of specific files in a Web Site that should be accessioned and which links should be documented or appraised must be done on a case by case basis.

APPRAISAL ALTERNATIVES

Alternative A

Accession the records of the persons or committees responsible for maintaining the Web Site. The records of these persons or committees should reflect the content and structure of the site. In fact, these files serve as documentation of the electronic files posted on the Web Site. Thus, the information that appeared on the Web Site could be reconstructed. In this case, we would be documenting the existence of a Web Site without actually accessioning the information on the Web Site.

Benefits

- This approach avoids the duplication of information NARA would be accessioning. The information provided by the persons or committees in charge of the Site, would provide researchers with evidence of the information which was posted and they would then search out the desired documents from the records of that agency. This would be especially true of larger agencies which strictly control the information on their Web sites.

Disadvantages/Problems

- Not all agencies have a centralized place where this information can be found. In smaller agencies, the Web sites might be constructed and maintained by interns or interested personnel, yet their records may not provide adequate information on the content and structure of the Web Site.
- This option also ignores the possibility that in the future, the information posted on the Web site might not appear in any other format. In these cases, it is necessary not only to appraise the records of those maintaining the files, but the files on the Web site itself.

Alternative B

Accession all the files within the Web Site. These could be viewed through a browser. However, it is important to note that different browsers servers will "interpret" the HTML commands differently. Also, most Web sites contain links to graphics and other sites, therefore those links or graphics would not be functional. In this case, the links can be documented by identifying the institution maintaining that site and providing a brief description of the content of those sites.

Benefits

- The Web site can be preserved in a fashion through which researchers will be able to "navigate." Researchers would also get a better idea of the original structure of the site.

Disadvantages/Problems

- At the moment graphics cannot be preserved, an integral part of most Web sites.
- The sheer size of some Web sites and the number of links that must be accounted for make them difficult to document.
- The possibility exists for duplicating information that already exists among the records of the agency.

Alternative C

Accession selected files from the Web Site, as well as preserving the records of the persons, offices, or committees maintaining the Site. Valuable files, which may not exist in any other format, or are more valuable in electronic format can be preserved. These files could be either requested from the agency without HTML markup (in plain ASCII) or NARA could maintain the markup.

Benefits

- This approach ensures the preservation of unique files or valuable information without the burden of accessioning the whole site.

Disadvantages/Problems

- In accessioning select files, it is important to document the context. The documentation package would include technical information, but also information of the content of the site where the selected file was originally placed.

Web sites are always changing. Files can easily be added, updated, and deleted. This poses a problem for accessioning files in a Web site. The solution proposed in the "Preserving Digital Information: Draft Report of the Task Force on Archiving of Digital Information" (August 24, 1995) is to take "periodic snapshots" of the pages in a site. Ultimately, the agency is responsible for scheduling the files in their Web site. NARA can work with the agency to develop a strategy for accessioning files which constantly are being changed.

ISSUES TO BE ADDRESSED

Identifying Information for Preservation

How can Web sites with valuable information be identified? Federal agencies are creating a large number of Web sites. Once agencies are no longer interested in maintaining that information, there is no mechanism in place to preserve that information for future users. Both GPO and NARA share an interest in preserving this information for future use. However, as Federal records, the Web sites must be scheduled along with other agency records. Therefore, records schedules could serve as a tool to identify valuable Government information on Web sites.

Transfer of Information to GPO and NARA

Once identified, what information from the Web sites should be transferred? As explained earlier, GPO and NARA have different goals. Each agency will have to decide what information on the

Web sites will be of value to their customers. Sometimes both agencies will be interested in the same information. However, GPO is primarily interested in providing information for short-term access. Since NARA is interested in maintaining indefinitely information with historic value, it needs to apply criteria for determining which information from Web sites warrants continued preservation by the Government.

How should this information be transferred to GPO and/or NARA without added burden to the agencies? GPO and NARA will have to work together to identify ways in which agencies can transfer the information without an added burden.

Permanent FDLP Access to Electronic Information Dissemination Products and Services

What is the most cost-effective and useful method for preserving FDLP access to electronic Government information available from agency Web sites or online services? The maintenance and migration of electronic information over a period of years can be very costly. If information already has been distributed in paper, microfiche or CD-ROM does it make sense to provide continued online access to the information? If an agency decides to discontinue access to information through their Web site, does GPO have a responsibility to obtain the information and provide funds and resources for its continued access through the FDLP?

Differences Between the Life-Cycle of Information Dissemination Products and Services in Electronic vs. Traditional Formats

How is the life cycle for electronic information different from that of traditional formats like paper and microfiche? What part of the information dissemination process must be changed in order to ensure extended access and the archivability of information on agency Web sites?

Attachment D-11

**Task 9: Inclusion in Electronic Formats of Materials Not Traditionally Included
in the FDL P in Either Paper or Microfiche**

Task 9: Evaluation of issues surrounding inclusion in electronic formats of materials not traditionally included in the FDLP in either paper or microfiche. Examples includes Securities and Exchange Commission EDGAR data [Task 9A, Attachment D-12], Federal District and Circuit Court opinions [Task 9B, Attachment D-13], patents, military specifications, Congressional Research Service reports, and a variety of other scientific and technical information (primarily contractor reports).

BACKGROUND

Government information which has not been included in the Depository Library Program in its "traditional," or non-electronic, formats come from all three branches of government. Two categories were specifically identified under this task for separate case studies: filings with the SEC (now available through the EDGAR system) [Task 9A, Attachment D-12] and Federal District and Circuit Court Opinions [Task 9B, Attachment D-13]. Other categories studied included patents; military specifications; Congressional Research Service publications; and scientific/technical reports from several agencies. These materials have not been included in the FDLP for a variety of reasons, but as the publishing agencies migrate to electronic dissemination methods, it may be possible to expand public access to these materials through the FDLP.

This task force report covers a very wide variety of materials from many sources, and expanded access to these materials might involve more than one solution. The alternatives outlined below should not be considered mutually exclusive. A combination of alternatives might address varying agency and FDLP needs in the most cost-effective way. Alternative F was submitted after the original task force report was completed, and is provided here as an additional alternative available for some materials not currently in the FDLP, but it has not received the same opportunity for analysis and public comment as the others.

1) Patents

The Patent and Trademark Office (PTO) disseminates information through a combination of PTO search facilities, Patent and Trademark Depository Libraries, and commercial dissemination from private vendors who purchase bulk data from the PTO at marginal cost. Bibliographic descriptions and some full text are available in electronic formats. The patent database was a major component of the two year federally-funded Internet Town Hall, a cooperative project of Internet Multicasting Service and New York University which provided free Internet access. Since the end of that project, the PTO has begun providing direct Internet access to the descriptive database. The plan is to offer searchable bibliographic text for approximately 20 years of patents. This free system will not include the full text of the patents.

The PTO called an open meeting for December 15, 1995, to "gain input into how it can maximize the potential of its information dissemination program. In view of technology changes, revisions to the Office of Management and Budget (OMB) Circular A-130, and the Paperwork Reduction Act of 1995 (Public Law 104-13), the PTO will review existing policies and...prepare a comprehensive information dissemination plan." At the same time, initiatives from the administration and the Congress are proposing major changes in the PTO. In a press release September 14, 1995, Vice President Gore announced that the PTO would be transformed into a "performance-driven, customer-oriented organization." While the impact on information dissemination is not spelled out, the announcement refers to commercial business practices and points out that the PTO is "fully funded by user fees."

2) Military Specifications and Standards

Military specifications and standards are not yet available, full text, in electronic format. They are offered free for delivery by mail from the Navy Print on Demand System (NPODS). They may be ordered by "TeleSpecs", a system which takes automated telephone orders from 7:00 a.m. to 10:00 p.m. Monday through Friday. It is not a fax back system, but orders are mailed to requesters the next day. Customers may also buy a subscription to an automatic distribution service. This organization also offers paid subscriptions to an online service (most current) and CD-ROM version (with bimonthly updates) which include descriptions of military specifications and standards and some other databases. Both services are relatively new and are priced for cost recovery.

3) Congressional Research Service (CRS) Studies

These comprehensive studies from the Library of Congress are very useful to the public but are not available through the FDLP, although the Major Studies and Issue Briefs are obtained and sold by a private vendor. There has been considerable interest in the depository library community in having CRS studies available to the general public. However, CRS is prohibited by Congress from any public distribution of their material, unless explicitly authorized by their congressional oversight committees. CRS is making their reports increasingly available to Congress in electronic format via CAPNET, the secure Capitol Hill network, but access is limited to congressional offices. Direct public dissemination through the Federal Depository Library Program would require a change in the current policy by Congress.

4) Scientific and Technical Information

While a great deal of scientific and technical information, including contractor reports, is distributed through the FDLP, there is also a great deal which is not in the program. Two agencies have been used in this task as representative of the issues for agencies, the GPO, and libraries.

4a) Technical Reports and Guidelines from the Environmental Protection Agency (EPA)

The EPA is a decentralized agency in which a number of offices and research centers produce or contract for technical reports. While many of these reports are provided to GPO for FDLP distribution, many others are not. Some staff members apparently believe that providing copies of documents to the National Technical Information Service (NTIS), or providing a single copy of NTIS diazo microfiche to GPO, satisfies information dissemination requirements of 44 U.S.C. Chapter 19. This is a misconception not unique to EPA. Some EPA CD-ROM titles are provided to depository libraries, but others are not. The EPA is making major efforts to provide information online, and this provides additional opportunities for federal depository libraries to participate in its dissemination efforts. No limitations on public access to online reports have been identified, although many EPA reports in traditional formats are sold by NTIS.

EPA uses the GPO's Federal Bulletin Board to disseminate some of its publications, thus meeting depository responsibilities. For example, an important element of EPA regulation is the development of Environmental Test Methods and Guidelines. EPA's solution to public access includes announcement of the availability of draft guidelines in the Federal Register. Proposed guidelines are released on the EPA gopher. Final guidelines are posted on the GPO's Federal Bulletin Board. GPO thus can provide the files for downloading, and also can sell paper copies to users who prefer that format. EPA staff has suggested that there would be a demand for compilations of these online materials into formats such as CD-ROM, created by GPO from agency source files.

4b) Technical Reports from the Department of Defense (DOD)

The Defense Technical Information Center (DTIC) maintains collections of three types of technical reports: classified; unclassified with limitation of export; and unclassified, unlimited. DTIC maintains a Technical Reports bibliographic database for both of the unclassified categories of reports. The database is available for purchase from DTIC in CD-ROM or online.

These products do not provide public access, since they are only available to government agency personnel, government contractors, and potential government contractors, who register with DTIC. The reason for this restriction is that the databases contain the "unclassified with limitation of export" category, although DTIC reports that the vast majority of reports fall in the "unclassified, unlimited" category.

DTIC forwards copies of all unlimited, unclassified reports to the National Technical Information Service (NTIS) for public sale, but most are not provided to depository libraries. The NTIS bibliographic database, including descriptions of these DTIC reports, is available for purchase through private vendors in online and CD-ROM versions.

DTIC is moving towards electronic storage of data and documents. The Electronic Document Management System (EDMS) is an integrated system which is moving DTIC from a manual, microfiche-based system to automated information management and document delivery. The system involves document scanning and optical storage. It can generate microfiche copies, since many DTIC customers still use microfiche. While the program includes a limited Web trial, DTIC probably will not provide public access to technical reports on their Web site because of security restrictions, and because technical resources must be devoted to serving primary clientele.

DOD is committed to its DefenseLINK Web site to link and point to all DOD home pages and a growing variety of unclassified material which is becoming available in electronic form. Some of the materials available as searchable databases on the Web are also sold in CD-ROM format. The DOD must adhere to restrictions on distribution of information which is classified or limited, and also must assure that its resources are available to its primary clientele such as government employees and contractors. Perhaps a restructured Depository Library Program could expand public access to such information by providing a separate source for unclassified electronic documents, one which did not place additional demands on DTIC's own technical resources.

FEDERAL DEPOSITORY LIBRARY DISTRIBUTION

This task addressed materials which are not in the program in traditional formats (paper, CD-ROM, microfiche or floppy diskette). Each of these categories of materials is distributed to its primary audience through government or cooperative channels, but not through the FDLP. The Patent and Trademark Office supports its own reading rooms and depository library program; military specifications are available on demand without charge. Scientific and technical reports are distributed directly from the originating agencies and secondarily through NTIS. Because of the enormous volume in most of these collections, the cost of depository distribution in paper or fiche would be large, and they would also present a significant processing and storage burden on depository libraries. GPO's decision has been to direct the limited resources available for support of depository printing and distribution to materials which do not have such specialized audiences and distribution programs. As these materials become available electronically, it may be possible to use the FDLP as an additional channel for public access.

DISSEMINATION ALTERNATIVES

Alternative A

Agency information is available through the Internet to the general public, from the agency itself, at no cost to the user. The GPO Locator will direct users, including depository libraries, to the agency site.

Benefits

- Information which has not been in the FDLP is available without charge to the public in its electronic form.
- Libraries can access selected publications on demand, without the burden of processing and maintaining large collections.
- Minimal costs are incurred by GPO for inclusion of new information in the FDLP.
- The GPO Locator enhances public access to the agency information.

Disadvantages/Problems

- Depository libraries without Internet capabilities cannot access the information.
- Delivery of graphics-inclusive contents like specifications and patents may require considerable communications band-width and high-end computers at the user end.
- Public access may place additional loads on agency computing and telecommunication resources, as well as on support services, and may present security problems.

Alternative B

Agency information is available electronically for a fee. The GPO will negotiate an agreement with the agency to pay the costs of online access for depository libraries. The agreement may include limitations on numbers of users or on remote access via library networks, but will not include any copyright-like restrictions on the use or reuse of the information. The GPO Locator will lead depository libraries to the agency site.

Benefits

- Information which has not been in the FDLP is available without charge to the public, at or through depository libraries, in its electronic form.
- Libraries can access selected publications on demand, without the burden of processing and maintaining large collections.
- The GPO Locator enhances access to the agency information.

Disadvantages/Problems

- GPO incurs new costs for access to information which has not previously been in the program.
- Depository libraries without Internet capabilities cannot access the information.
- Public access may place additional loads on agency computing and telecommunication resources, as well as on support services, and may present security problems.
- Agencies or distributors may see free public access through the FDLP as a threat to revenue generation.

Alternative C

GPO establishes a database of information from agency sites which is tailored to the FDLP. Agencies provide electronic source files, or GPO downloads files from agency sites.

Benefits

- Information which has not been in the FDLP is available without charge to the public in its electronic form.
- Agencies are relieved of security problems related to unauthorized access to classified or non-government information in their primary sites.
- Agency computer and telecommunication resources do not experience additional loads from depository library or general public access, as agencies may direct public users to FDLP sites.

Disadvantages/Problems

- GPO incurs new and essentially duplicative costs for access to information which has not previously been in the program. GPO costs include downloading, reformatting, search mechanisms, and long-term storage.
- Provision must be made for updating dynamic data as it changes on the agency site.

Alternative D

Information from online sources is made available to depository libraries in CD-ROM format instead of through direct connections to online data. Agencies produce CD-ROM titles, with GPO riding orders for the cost of copies for FDLP distribution, whether or not discs are produced or procured through GPO.

Benefits

- Information which has not been in the FDLP is available without charge to the public in its electronic form.
- Currently, depository libraries are better equipped to handle CD-ROM than online services.
- CD-ROM provides for extended access in libraries throughout the country.

- Agency computer resources do not experience additional load from depository or public access.
- Agency revenue streams from online user fees are protected.

Disadvantages/Problems

- GPO and/or agencies incur new costs for access to information which has not previously been in the program.
- Large report collections on CD-ROM may require a large number of disks, creating storage and access pressures in libraries.
- CD-ROM is not as timely for current information as direct online access, and does not permit dynamic updating of changing information.

Alternative E

Information from online sources is made available to depository libraries in CD-ROM format instead of through direct connections to online data. GPO obtains agency source files or downloads files from agency sites, and creates CD-ROM collections for FDLP distribution.

Benefits

- Information which has not been in the FDLP becomes available without charge to the public in its electronic form.
- Currently, depository libraries are better equipped to handle CD-ROM than online services.
- Use of information is facilitated by GPO's creating discs with consistent search interfaces.
- CD-ROM provides for extended access in libraries throughout the country.
- Agency computer resources do not suffer additional strain from depository or public access.
- Agency revenue streams from online user fees are protected.

Disadvantages/Problems

- GPO incurs new costs for access to information which has not previously been in the program.
- Large report collections on CD-ROM may require a large number of discs, creating storage and access pressures in libraries.
- CD-ROM is not as timely for current information as direct online access, and does not permit dynamic updating of changing information.

Alternative F (NTIS Proposal for Depository Library Access)

Note: This alternative was proposed by NTIS after the completion of the original task force report, so it has not received the same opportunity for analysis and public comment as the other alternatives. While it proposes a program which would not be part of the FDLP, it does identify an option for providing public access to federally-funded scientific, technical and engineering publications from the NTIS collections, so it is included here as additional information for the study. The description of this alternative and many of the benefits and disadvantages/problems were identified by NTIS and are presented in its own words; some of the benefits and disadvantages/problems were identified by the task force and GPO staff, based on earlier input from the library community.

NTIS has proposed a means to assure the American public access to information in its collection for free through the depository libraries without a subsidy from taxpayer funds. Access will be provided to electronic image files of documents as they become available to NTIS. The proposal covers access to image files of documents of scientific, technical and related business nature that would be available to the depository libraries under the current program in paper or microfiche formats as well as access to a wide range of materials that have previously been accessible to the depository libraries only through the NTIS sales program. The initial proposal does not include NTIS CD-ROM titles or fee-based online information services available through FedWorld but it would provide easy and immediate access to a substantial number of fugitive documents not previously available to the FDLP.

NTIS plans to initiate a pilot with approximately 20 depository libraries by early summer. Pilot participants will have access at no charge to the pilot to the full electronic bibliographic records of the incoming NTIS document stream and will be able to request downloads of all documents available in electronic format. The purpose of the test is to establish procedures and appropriate operating protocols for complete lights out, 24 hour a day, seven days a week operation. Expected duration of the test period will be approximately nine (9) months at which time a decision on the full extent of access to the depository system should be possible.

NTIS will provide depository libraries with online access on demand to the electronic images of federally funded scientific, technical and engineering publications in its collection at no charge, as often as needed, and without any time limitation in exchange for a simple agreement from each library not to release the electronic file outside the library or use it for commercial purposes. No restrictions of any kind are placed on the use or redissemination of documents printed from these electronic files. Inter-library exchange of these paper or microfiche documents would be expected to proceed as they currently do with depository library materials. Access will be provided through an online search system with no charges to the library for anything it downloads for printing. Files can be printed locally if the library has a printer with PostScript print capability. The library or the user would absorb print costs but could make as many paper copies as needed.

Currently Defense Department publications are entering the NTIS collection in image format. Several other science agencies are making rapid progress on migrating to electronic imaging and NTIS is within months of scanning most items it receives in paper. Virtually everything entering the NTIS system should be in electronic image format within a year. NTIS expects to intake about 100,000 documents during this fiscal year.

Benefits

- NTIS would make government information that has not been included the FDLP available for free access in local communities.
- No appropriated funds will be required since NTIS will absorb all costs of storage and access as a business expense paid for out of user fees from the NTIS system as a whole and not by the taxpayers.
- A large class of fugitive documents -- those from DOD -- would immediately become available to the public, and NTIS working relationships with other major federal producers of technical information products in electronic form ensure the future availability of a more comprehensive collection of federal technical information.
- Libraries could access selected publications on demand without the burden of storing or indexing large collections or dealing with individual agencies.
- Depository libraries could provide an advertising vehicle for NTIS services by increasing public awareness.

Disadvantages/Problems

- There would be a temptation which the libraries must resist to release electronic files of these materials on the World Wide Web. Such a release would destroy NTIS own revenue generating capabilities and eliminate funding to support free access in the future. NTIS restrictions apply only to the document image files themselves and should in no way interfere with patrons ability to search and locate documents they need.
- Downloading and printing of large PostScript files can require considerable Internet band-width as well as high-end equipment at the library.
- Depository libraries would have to accept copyright-like restrictions on the use and re-use of materials obtained from NTIS through the FDLP and would be put in the position of enforcing those restrictions. There is a risk to NTIS' market for these publications if library patrons (some of whom may be resellers) are not satisfied with the restrictions imposed by NTIS and do not comply with them.
- Compliance with NTIS' restrictions may necessitate that use of the NTIS service be restricted to mediated searches (those conducted by depository library staff). This would eliminate self-service at public access workstations and make it more labor intensive (costly) for libraries, thus precluding some libraries from offering the NTIS service to their patrons, and limiting the public access to these materials.
- This alternative as proposed would not be an official part of the FDLP, so there is no statutory obligation for NTIS to initiate or sustain it, and no guarantee that this service would be available to all depository libraries. Since depository obligations under 44 U.S.C. Chapter 19 are for the publishing agencies, unless this NTIS service was brought under the FDLP officially, it would not fulfill agency obligations, and GPO would have to continue to work directly with agencies to make information available without restrictions through the FDLP.

ISSUES TO BE ADDRESSED

Government Information Policy

How can the Federal Depository Library Program assist the Government in fulfilling its responsibility for informing its citizens in the new electronic environment? How can basic public access to government information be assured despite increasing requirements that agencies find new ways to raise revenues?

Depository Library Role in Access to Non-GPO Data

There is no current model for bringing electronic information stored on remote agency sites officially into the FDLP. Should there be? Should GPO attempt to establish interagency agreements for inclusion of material available from agency Web sites in the FDLP? If so, what limitations, restrictions or guarantees should be covered by these agreements? What provisions should be made for extended FDLP access to this type of information? Is the fact that the GPO Locator directs users to an agency site enough to consider the information at that site an "official" part of the FDLP? What is the responsibility of depository libraries for providing assistance with information at non-GPO sites, and for providing facilities for downloading and printing?

Depository Library and GPO Role in Managing Limitations on Usage or Redissemination

If GPO negotiates agreements with agencies which put limits on redissemination of their data, libraries will be put in the position of enforcing copyright-like restrictions on Government information. They might be required to check for user affiliation, or forbid downloading of data. Such restrictions are used in libraries for commercial products, but have not been in place for Government information. Should Congress and GPO cooperate in creating systems which place limits on the use of Government information? Is an expansion of access, even with limitations, reason enough to accept limitations which agencies need in order to protect their revenue stream?

Extended Access and Permanent Archiving

How will the public be assured of access to information over periods of many years, if electronic resources such as web sites are purged of older materials? How will electronic information be permanently archived? Although CD-ROM can provide access for a number of years, it is not considered a permanent medium and all data on CD will need to be refreshed or migrated to new formats for truly extended access.

Attachment D-12

Task 9A: Case study on Securities and Exchange Commission EDGAR data

TASK 9A: Evaluate issues surrounding inclusion of the Securities and Exchange Commission (SEC) EDGAR System in the Federal Depository Library Program when that information is not already included in paper or microfiche format.

BACKGROUND

The Securities and Exchange Commission (SEC) administers federal securities laws. Issuers of securities making public offerings must file financial and other pertinent data with the SEC. This information is available in SEC public reading rooms and through private vendors. It is also available through the SEC's Electronic Data Gathering, Analysis and Retrieval System (EDGAR) electronic filing system. According to the SEC the primary purpose of EDGAR is to "increase the efficiency and fairness of the securities market for the benefit of investors, corporations, and the economy by accelerating the receipt, acceptance, dissemination, and analysis of time-sensitive corporate information filed with the agency."

EDGAR is used by nearly 75% of publicly traded domestic companies to make most of their filings. All public companies will be required to file electronically with the SEC by May, 1996. The SEC receives approximately 12 million documents a year, and estimates that users download nearly 17,000 documents a day.

In 1993, the Internet Multicasting Service and New York University entered into an agreement to test Internet as a vehicle for making this data available to a broader public. That two-year experiment was funded by the National Science Foundation through a grant which expired on October 1, 1995.

In a speech on August 11, 1995, SEC Chairman Arthur Levitt announced that the SEC would provide access to EDGAR on its own World Wide Web site. Levitt said, "It is a major Commission priority to use electronic communications to bring clearer, faster, more complete disclosure to investors as well as to reduce costs for issuers. This represents a logical step in our efforts to better inform investors....We've had many creative offers from the private sector to keep EDGAR on the Internet..., but all of them would in some way limit the amount of information available, or else attach too many commercial strings. Taxpayers and shareholders have already paid to compile this information--they should not have to pay again."

The SEC Web site provides access to all of the public electronic filings made from 1994. It supports user access through Web Browser or Anonymous File Transfer Protocol (FTP). EDGAR access is provided free of charge on a day-delayed basis. Direct bulk feed of EDGAR data also can be purchased from Lexis/Nexis, which operates the EDGAR dissemination service.

The SEC intends to incorporate new technologies and concepts to facilitate the capture, analysis, and dissemination of the financial data the SEC is required to obtain. To that end, a Technology Conference was held on August 14, 1995, followed by a Request for Information (RFI) in October. The RFI sought information on the possible privatization of the EDGAR system, in addition to a number of other policy and technical issues. The RFI asked whether the agency should continue to maintain and operate this service, "or should this service be provided by the private sector either on the Internet or via some other means?"

On January 4, 1996, the SEC issued a second RFI concerning the EDGAR system. This RFI supplements the first and specifically solicits comments on several potential EDGAR system architectures. Unlike the first RFI, which proposed a possible privatization of the EDGAR service currently provided through the SEC Web site, all four models presented in the new RFI assume that "the SEC will retain its Internet site and continue to offer the current level of EDGAR document dissemination service."

FEDERAL DEPOSITORY LIBRARY DISSEMINATION

Information filed with the SEC has never been part of the FDLP in paper, electronic or microfiche format. Although at one point SEC entered into discussions with GPO about creating a CD-ROM version of their documents, which would have included FDLP distribution, no agreement was reached.

DISSEMINATION ALTERNATIVES

Alternative A

EDGAR is maintained on the SEC Web site and the GPO Locator will direct users, including depository libraries, to the SEC site for this information.

Benefits

- No new product development is needed.
- No costs are incurred by GPO or SEC for inclusion of the information in the FDLP.
- The GPO Locator enhances public access to SEC filings by making them easier to find.

Disadvantages/Problems

- Depository libraries without Internet capabilities cannot access the EDGAR database.

Alternative B

The SEC provides the electronic data to GPO for distribution to depository libraries on CD-ROM. Preliminary discussions with SEC about CD-ROM production assumed dissemination of approximately 10,000,000 pages of information per year. This includes Form Q, Form K, mergers/acquisition, and proxy statement filings. Over a one year period this would equate to the production of approximately 52 discs. The estimated cost to GPO for replication and distribution of these discs to 700 depository libraries would be \$182,000. Projected costs might be reduced by compressing files and/or by distributing discs less frequently. The SEC would be charged for mastering the discs unless the Transition Plan for the FDLP is approved, in which case mastering could be taken from the FDLP appropriation. The GPO Locator would direct users to the SEC Web site for more immediate access to filings.

Benefits

- Currently, depository libraries are better equipped to handle CD-ROM than online services.
- CD-ROM is a good format for ensuring extended (15-30 year) access to SEC filings.

Disadvantages/Problems

- Additional cost to the FDLP of approximately \$182,000 per year, or more if GPO pays for premastering the discs. Since SEC filings have never been a part of the FDLP, their inclusion in the FDLP in electronic format nets no cost savings for elimination of comparable paper or microfiche products from the program.
- Discs will not be as timely as the SEC Web service. However, as access to the SEC Web site is free, depository libraries still retain a mechanism for timely access of current SEC filings.

ISSUES TO BE ADDRESSED

Permanent Archiving

The National Archives and Records Administration (NARA) is engaged in negotiations with SEC to identify and schedule the records of enduring value in the EDGAR system. NARA has expressed concern about long-term access to files if the database is privatized, and would prefer in that case to acquire the data directly on magnetic tape cartridge. Any EDGAR data transferred to NARA will not be maintained online and accessible via the Internet on a continuing basis. However, a specific request will trigger access to the EDGAR data.

Long Term Access

The SEC has not indicated how long filings will remain actively available on their Web site. If filings are "retired" after a few years, access to earlier information would be available only in SEC reading rooms or through private vendors, unless provision is made for CD-ROM backup or archival "mirror" sites.

Methods for Bringing Electronic Information Officially Into the FDLP

There is no current model for bringing electronic information stored on remote agency sites officially into the FDLP. Should there be? Should GPO attempt to establish interagency agreements for inclusion of material available from agency Web sites in the FDLP? If so, what limitations, restrictions or guarantees should be covered by these agreements? What provisions should be made for extended FDLP access to this type of information? Is the fact that the GPO Locator directs users to an agency site enough to consider the information at that site an "official" part of the FDLP? What is the responsibility of depository libraries for providing assistance with information at non-GPO sites?

Attachment D-13

Task 9B: Case study on Federal District and Circuit Court opinions

TASK 9B: Evaluate how United States Court of Appeals' published slip opinions might be included in the Federal Depository Library Program (FDLP) electronically, although traditionally they have not been a part of the FDLP in either paper or microfiche format.

INTRODUCTION:

The United States Courts of Appeals has traditionally published their own slip opinions in paper form and has a long standing waiver from the requirement to use the services of the Government Printing Office (GPO) to produce printed materials. The opinions are distributed to the parties, members of the court community, law libraries, and are available to the public through various sources. As technology has progressed, the courts have taken advantage of the improved efficiencies and began electronically transmitting opinions to interested legal publishers and the public, created court-operated electronic bulletin board systems for further public distribution to the bar and the public, and made slip opinions available on the Internet for yet further distribution.

The following paper presents a review of existing electronic methods for dissemination of government information and discusses, in particular, alternatives the courts might consider for disseminating appellate court opinions. The paper addresses (1) the background for the long-standing practice of producing slip opinions using local printing contractors, (2) the judiciary's relationship with the federal depository library program, (3) the alternatives for distributing slip opinions electronically, and, (4) the issues posed by electronic distribution. The paper does not offer any recommendations. Any change to current practices would need to be considered by the Administrative Office of the U.S. Courts, the courts, and the Judicial Conference of the United States.

BACKGROUND.

Production of slip opinions for the federal courts of appeals is handled locally by the individual courts of appeals. There is no centralized administrative control over the slip opinion process, beyond the assistance provided by the Administrative Office (AO) for procuring a printing contractor. All policy regarding production and distribution is made by each appellate court. Slip opinions are typically produced and distributed to the court, and to both paid and free subscribers, by contract vendors.

Wide access to the federal appellate opinions is available in both hard print and electronic formats. Historically, the courts have provided hard print copies of slip opinions to interested law schools within their circuit, often in exchange for free subscriptions to those law schools' journals. Other non-profit organizations, including government organizations, usually receive free subscriptions to the published opinions. Copies of the opinions also are provided to the press. In addition, opinions always have been available to the public through paid subscriptions and in the circuit libraries.

In addition to access to print copies, electronic access to appellate opinions is available through a variety of sources. In addition to the electronic legal research options available from numerous commercial vendors, all twelve circuits provide public access to their recent published opinions through their own electronic bulletin board systems (BBS) or the Internet. The systems operate on toll-free telephone lines and opinions are provided primarily in ASCII or WordPerfect format, to allow the broadest access for

users. There is no full text search capability on the bulletin boards. In addition to the text of the opinions, the bulletin boards provide general court information and an index of cases to assist users in their searches. Typically, users do not read the cases while on-line on the BBS but, rather, download them to their computers to reduce on-line access costs as well as to improve readability. Experience has shown that most legal researchers continue to prefer to read lengthy text, such as court opinions, from hard print copies, as opposed to reading from a computer screen.

Each circuit has established local rules governing access to and availability of these electronic bulletin boards. The policy of the Judicial Conference of the United States is to authorize the collection of a fee for electronic access to court information, consistent with a mandate from Congress. The current PACER (Public Access to Court Electronic Records) fee is \$0.60 per minute. The fee was authorized by the Congress to reimburse the judiciary for costs incurred in providing electronic public access services. The fee is based on costs for development, implementation and enhancement of electronic public access services. The Judicial Conference further authorized that exemptions from the fee may be granted by a court, in order to avoid unreasonable burdens and to promote public access to information. The exemption is intended to accommodate those users who might otherwise not have access to the information in electronic form. Examples of persons and classes of persons who may be exempted from these fees include indigents and not-for-profit organizations.

The Judiciary has no plans at this time to initiate an internal process to collect opinions and post them on the Judiciary's own Internet Web Site, which is still in its infancy. However, there have been several developments recently in providing Internet access to the opinions. One circuit is using a third-party Internet host to upload its opinions to the Internet. There also is a commercial vendor who has added all appellate published opinions to its Internet Web Site, purchasing opinions from the courts when necessary and then posting them to the site for free public use.

In addition, a consortium of law schools, generally one from each circuit, provides free access to appellate opinions through each school's Internet Web Site. Circuits were approached individually by the law schools about participating in this effort. Opinions from all circuits are available through the law school web sites. The member law schools have complete responsibility for retrieving the opinions, processing them as they determine necessary and uploading them to the Internet.

DISSEMINATION TO FEDERAL DEPOSITORY LIBRARIES.

The Judiciary has a longstanding waiver from the requirement to utilize the Government Printing Office's (GPO) printing resources. An indefinite waiver was renewed by the Joint Committee on Printing in 1985, which requires that the Judiciary participate in the FDLP by providing copies of opinions to all requesting depository libraries. The Judiciary has worked with GPO to implement this distribution process; however, to date, no agreement has been reached on the most efficient and effective means to distribute the thousands of opinions published by the courts of appeals each year.

In 1994, discussions began in order to determine how opinions could be distributed to the FDLP electronically, especially since the federal appellate courts had been widely circulating their opinions electronically for some time. The Judiciary recognized the efficiency in handling the large volume of slip opinions in this manner. However, this project has been delayed in recognition of GPO efforts in establishing its Web Site; the judiciary's progress in establishing an electronic bulletin board in each circuit; and now, the current GPO study.

ALTERNATIVES FOR DISSEMINATING OPINIONS TO FEDERAL DEPOSITORY LIBRARIES.

Alternative A

The Judiciary could provide electronic versions of the slip opinions to GPO, which would in turn add them to the GPO Access Web Site as full-text searchable databases. GPO requires the collection of opinions from all circuits. Due to the decentralized nature of the Judiciary, it may be necessary to establish a focal point for this effort, in order to ensure consistent compliance with GAO needs. Therefore, this alternative may require that the Administrative Office collect the opinions and send them to GPO. In this event, the AO would need to establish a reimbursable agreement with GPO to pay the costs of routine collection, preparation, conversion, and storage of the electronic data.

Benefits

- The printing waiver granted to the Judiciary is continued.
- Public access is improved, a goal the Judiciary has pursued actively and successfully in recent years.
- Creation of a full-text searchable database enhances the usefulness of opinions to researchers.
- Long term accessibility of opinions is maintained by GPO and the FDLP.

Disadvantages/Problems

- Collecting opinions from the courts and providing them to GPO will require increased AO staff resources to develop the applications for opinion collection and dissemination and to monitor the daily collection of opinions. This will mean increased costs for the AO, which would likely have to acquire funding for this purpose.
- Increased costs would be incurred by the Judiciary for the data formatting and storage done by GPO. Acquiring additional funding for this purpose would not be required if the Electronic Federal Depository Library Program Transition Plan is approved, in which case costs for conversion and storage would be paid for by the FDLP appropriation.

Alternative B

The Judiciary could provide electronic versions of the slip opinions to GPO, which would in turn add them to the Federal Bulletin Board for depository access.

Benefits

- The printing waiver granted to the Judiciary is continued.
- Public access to opinions is improved by providing one central location for all appellate court opinions.
- Long term accessibility is controlled by GPO and the FDLP.

- No additional conversion or storage costs would be incurred by the Judiciary.

Disadvantages/Problems

- Collecting opinions from the courts and providing them to GPO will require increased AO staff resources to develop the applications for opinion collection and dissemination and to monitor the daily collection of opinions. This will mean increased costs for the AO, which would likely have to acquire funding for this purpose.
- Only about 341 depository libraries are registered to use the Federal Bulletin Board; therefore, this alternative may not provide the broadest access to end users.
- Opinions would be available only as ASCII or WordPerfect files making them less useful than a full-text searchable database.

Alternative C

The Judiciary's existing BBS services are being used broadly and have received general acceptance. These BBS services could be made the center of the FDLP electronic access program, by offering the depository libraries free access to the opinions on each circuit's BBS. It is not clear how this would be implemented technologically. The GPO Locator could direct users to the appellate courts BBS for slip opinions. It is possible that end users would be required to access opinions by first going through the FDLP program, adding some steps to the research process.

Benefits

- The printing waiver granted to the Judiciary is continued.
- Public access to opinions is improved.
- There is no need to establish a centralized collection method, therefore no additional costs are incurred by the AO.
- Each circuit maintains control over its own opinions.
- Although this alternative is likely to increase costs to the Judiciary, e.g., for enhancing the BBS; implementing new password maintenance; adding phone lines; and increased hardware costs for larger COMPUTERS for the BBS, these costs might be offset by the PACER fee account.

Disadvantages/Problems

- With multiple sources for the opinions, it is more time-consuming for users to access the information they need.
- Opinions would be in ASCII and WordPerfect format; therefore, text searching would not be available.
- Depository libraries would have to register and become familiar with multiple bulletin board systems.

- Long term accessibility is determined by each circuit and cannot be guaranteed.

Alternative D

The Judiciary could support its own Internet Web Site to collect and store opinions. The opinions would be full text searchable. The GPO Locator would direct users to the Judiciary Web Site for appellate court opinions.

Benefits

- Public access to opinions is broadened and improved.
- The printing waiver granted to the Judiciary is continued.
- Security and control of the information would be controlled by the Judiciary.
- The visibility and image of the Courts of Appeals and the Judiciary is improved.
- Costs for maintaining opinions on the Web Site would be offset in part by other applications the site would provide.
- As a full-text searchable database, opinions are more useful to researchers.

Disadvantages/Problems

- As with Alternative A, costs would be incurred by the Judiciary to collect and format the opinions for dissemination. There also would be on-going costs associated with the maintenance and archiving of the opinions. Thus, costs to the Judiciary would be increased.

Alternative E

The law school consortium project is the leading effort to consolidate the slip opinions on the Internet. The Judiciary could endorse the law school consortium project and create a partnership between the consortium, the Judiciary (most likely, through the AO), and GPO. Rather than the Judiciary or GPO maintaining the data, the consortium would provide access to the opinions. The GPO Locator would refer users to law school Web Sites. Currently, the consortium schools retrieve opinions from their local circuit BBS and, if opinions are needed from another circuit, the user is transparently directed to the other law school Web Site with the requested opinions.

Benefits

- The printing waiver granted to the Judiciary is continued.
- Public access to opinions is improved.
- There is no increase in the resources needed by the Judiciary.
- This information service will be maintained by the law schools.

Disadvantages/Problems

- The Judiciary and FDL P are dependent on the law schools to maintain access to the opinions. Moreover, there is no guarantee that opinions will be available for long term access. Arrangements concerning these issues would have to be made with the participating law schools before GPO could endorse the project.
- Each of the law schools determine how they wish to format the opinions. Currently, there is no national standard for format or appearance.
- Information is located at several sites, and the user must know which law school Web site to search in order to locate an opinion. The GPO Locator could help overcome this problem.

4. ISSUES.

In reviewing alternative methods for electronically disseminating slip opinions to the FDL P, a list of issues has been developed. Some of these issues were raised during the development of the bulletin boards and were resolved according to the needs and priorities of the circuits. Should the federal courts change individual or collective practices, these issues will need to be revisited.

Long-Term Access

1. For what duration are opinions maintained on-line?
2. Should there be an archiving process developed?
3. What organization(s) has responsibility for creating an electronic archive if one is necessary?
4. Is there demand for alternative, near-line access, such as CD-ROM?

Requirements for Electronic Access

1. Should information available electronically from the Judiciary be provided in a format to assist users in conducting legal research, or is this primarily a means of disseminating information without affecting the form and utility of the information provided?
2. Legal research requires software with full text search capability and requires access to historical records, both of which add significant costs to making opinions available electronically.

Need and Demand for an Alternate Method of Dissemination

1. With the current variety of judiciary, non-profit, and commercial sources for slip opinions, is it necessary to develop another alternative method of dissemination through GPO or the Judiciary?

2. Is there a market demand that is not being met by the various public dissemination methods currently available? If so, do the costs of establishing an additional alternative method of dissemination outweigh the need demonstrated?

Ensuring the Integrity of Data

1. What controls exist in any electronic system to ensure the integrity of data?
2. Is there a need to have "true" or "certified" electronic versions of slip opinions? Since each circuit formats its decision uniquely, in order to provide an accurate and exact copy, it will be necessary to use Adobe Acrobat Portable Document Format files.

Costs for Dual Format Distribution

The Judiciary will continue to have a demand for paper copies of decisions by judges, parties, law schools, private practitioners, and others who now subscribe to the courts. Thus for the foreseeable future, enhanced electronic dissemination will not reduce costs, but will considerably increase them, because it will be necessary to maintain dual methods of distributing court opinions.

Attachment D-14

Task 10A: Case study on STAT-USA services

TASK 10A: Review the effects of offering free public access to STAT-USA information products and services through the Federal Depository Library Program (FDLP).

BACKGROUND

STAT-USA is a self-funding organization within the Department of Commerce. Its mission is to produce and distribute, and to assist other Government agencies in producing and distributing, world class business, economic, and Government information products that American businesses and the public can use to make intelligent and informed decisions. Services are provided through a variety of electronic media including dial-up bulletin board, CD-ROM, diskette, and the Internet.

Economic Bulletin Board

More than a decade ago, STAT-USA's predecessor organization, the Office of Business Analysis (OBA), started the Economic Bulletin Board (EBB). The EBB was designed to deliver, in electronic format, current economic and business information to the public as soon as it was made available. It was also designed as a one-stop source for economic news, so that customers would not need to go to dozens of different agencies looking for indicators of the state of the U.S. economy. OBA began charging for access to its information services in 1986 at the direction of then Under Secretary of Commerce Bud Brown. Since the EBB was a valuable business tool, it was believed that the business community should help defray the costs associated with its operation. Early EBB fee structures were designed to provide reasonable payments from large scale customers and provide access to one-time or infrequent users at very low prices.

National Trade Data Bank

In 1989, OBA was assigned to plan and implement the National Trade Data Bank (NTDB) which was mandated by the Omnibus Trade and Competitiveness Act of 1988. The Act called for the Department of Commerce to lead an effort to bring together Government information related to international trade and export promotion and to make these data available to the U.S. public in a low-cost, electronic form. OBA selected CD-ROM as the most cost-effective technology to distribute what was anticipated to be a large collection of information from a variety of agencies. The concept of user fees was supported in the language that created the NTDB which allowed Commerce to charge "reasonable fees" for NTDB access. Moreover, since appropriations to fund the NTDB never adequately covered the actual costs of developing and operating the data bank, OBA became reliant on customer fees to partially defray costs of keeping the NTDB open.

This perilous financial situation was recognized by Vice President Gore's first National Performance Review (NPR) in 1994 which recommended that the National Trade Data Bank be placed on a firm financial footing. This, and other NPR recommendations led to three outcomes:

- STAT-USA was established in October 1994 with the explicit mission to develop electronic business, economic, and trade information services.

- A revolving fund was established with a one-time appropriation of \$1.67 million to set up STAT-USA operations and provide a financial safety net until it could operate on a cost recovery basis.
- Provisions of the Omnibus Trade and Competitiveness Act of 1988 pertaining to the price of the NTDB were amended to authorize STAT-USA to recover the full cost of operating the NTDB.

STAT-USA/Internet

STAT-USA/Internet contains many of the same types of information found on the NTDB CD-ROM, the EBB, and the National Economic, Social, and Environmental Data Bank (now discontinued). However, having this information available in one Internet location has proven to be more timely and more useful to many libraries. Moreover, STAT-USA makes use of current information searching tools which provide more accurate search results than similar searches conducted on the CD-ROM.

FEDERAL DEPOSITORY LIBRARY DISTRIBUTION

STAT-USA has enjoyed a long and steady relationship with the depository library community. Many librarians who we have come to know convinced STAT-USA of the value of serving the U.S. public through the FDLP.

An official relationship with the FDLP began in 1989 when the EBB was included as one of the five original pilot projects to determine the feasibility of FDLP access to Government electronic information services. One hundred libraries were provided access to the EBB from June 1, 1990 - December 30, 1990. GPO reimbursed OBA \$15,000 for access by the 100 participating libraries during the trial period. The results of the study were mixed; a relatively small number of libraries actually took advantage of the service.

CD-ROM use by the business community was in its infancy during the late 1980's and early 1990's. Consequently in its implementation plans for the NTDB in 1990, OBA specifically planned for free distribution of the CD-ROM through the FDLP to meet the Congressional intent for this information to be widely disseminated. Potential users of the information would not be required to own CD-ROM hardware and software, but could access the NTDB at the nearest depository library holding the CD-ROM in its collection.

When the NTDB CD-ROM was first issued in October 1990, more than 600 depository libraries elected to receive it. During the ensuing five years, the NTDB has grown to become one of the most widely used CD-ROM titles in the FDLP. 1,070 depository libraries now receive the monthly set. Many depository libraries have indicated they permanently mount the NTDB due to its constant demand by library patrons. The size of the NTDB has grown considerably since the first issue which contained roughly 40,000 documents. Today, it contains nearly 250,000 documents and requires two separate discs to deliver the entire collection each month.

STAT-USA continued its open relationship with depository libraries when it established STAT-USA/Internet in 1994. Starting that Fall, depository libraries were given single-user free access to this Internet-based information service.

STAT-USA initially intended to accept depository applications directly for STAT-USA/Internet. However, library demand for this service quickly exceeded the ability of Commerce staff to create new accounts, maintain records on STAT-USA internal computer systems, and provide applying depository libraries with

timely notification of the activation of their account. Part of the registration pressure was eased in 1995 when the GPO Library Programs Service (LPS) staff agreed to take over many of the administrative duties associated with signing up libraries to access the service. Currently, 521 depository libraries access STAT-USA/Internet.

DISSEMINATION ALTERNATIVES

Alternative A

STAT-USA will continue to offer STAT-USA/Internet to the FDLP with the costs recovered from other STAT-USA fees.

Benefits

- STAT-USA relies on depository libraries as advertising vehicles for its services. Many current STAT-USA customers were first introduced to the NTDB or STAT-USA/Internet through use of these services in a library. Many library patrons eventually want their own subscription to use in their home or office. Depository libraries provide very low cost exposure to STAT-USA products and assist us in marketing our services.
- STAT-USA routinely refers large numbers of customers to depository libraries to access its services. There are still many information customers who do not possess the computer technology to access STAT-USA information, do not want to pay for the services or cannot afford them, or want to try out the service before they buy. STAT-USA refers these customers to the FDLP community and views depository libraries as a public safety net to ensure public access to this information.

Disadvantages/Problems

- STAT-USA began its relationship with the FDLP during a period when appropriated funds supported free distribution of STAT-USA discs and the provision of other electronic services to libraries. Substantial sums were expended by STAT-USA to provide depository copies of the NTDB CD-ROM, train librarians in their use, and provide free customer support. Although STAT-USA management remains committed to the FDLP, lack of appropriated funds now makes it much more difficult for STAT-USA to participate in the FDLP.
- Depository libraries have requested more than a single user subscription to STAT-USA/Internet and objected to the requirement that they not offer access to STAT-USA/Internet over their networks unless they can restrict access to a single simultaneous user.
- Libraries want to ensure the broadest public access to the information available through STAT-USA at no cost to patrons. Since U.S. Government information cannot be copyrighted, libraries can freely disseminate electronic Government information as broadly as they so chose (and their resources permit), thus undermining the ability of STAT-USA to exist as a self-funding agency. This problem exists even when the depository libraries (or others) purchase access to STAT-USA themselves; it is not exclusively a problem of FDLP access.

Alternative B

GPO would purchase access to STAT-USA/Internet for the depository libraries. Based on the published prices for STAT-USA/Internet access, the current level of access (single simultaneous user) for the 521 libraries currently selecting STAT-USA/Internet would cost \$130,250 per year. For \$208,400 GPO could purchase "Class C" access for 521 libraries; that would permit access to all users within a single Class C IP Address in each library. For \$416,800 GPO could purchase access for 6 to 10 simultaneous users for each of the 521 libraries. (This is comparable to the original number of GPO Access subscriptions provided to each depository library.)

Benefits

- STAT-USA continues to rely on depository libraries as advertising vehicles for its services.
- STAT-USA continues to refer large numbers of customers to depository libraries to access its services and retains depository libraries as a public safety net to ensure public access to this information.
- Depository libraries could increase the number of simultaneous users with access to STAT-USA/Internet if GPO elected to purchase Class C service or service for 6 to 10 simultaneous users.

Disadvantages/Problems

- Libraries want to ensure the broadest public access to the information available through STAT-USA at no cost to patrons. Since U.S. Government information cannot be copyrighted, libraries can freely disseminate electronic Government information as broadly as they so chose (and their resources permit), thus undermining the ability of STAT-USA to exist as a self-funding agency. Although the payment by GPO of fees for access by depository libraries would compensate STAT-USA for the costs of providing FDLP access, it would not eliminate the problem created by libraries offering remote access or re-disseminating the information from STAT-USA. This problem exists even when the depository libraries (or others) purchase access to STAT-USA themselves; it is not exclusively a problem of FDLP access.

ISSUES TO BE ADDRESSED

Funding for Depository Copies

STAT-USA drastically reduced its costs for providing discs to the depository libraries by switching CD-ROM production from the National Technical Information Service (NTIS) to GPO. STAT-USA estimates it cost nearly \$75 thousand per year to supply FDLP copies of CD-ROM titles produced through non-GPO replication contracts. These funds are paid by GPO now that the NTDB is produced through a GPO CD-ROM replication contract.

Costs for FDLP access to STAT-USA/Internet are currently covered by STAT-USA. GPO could purchase access for the depository libraries, either using STAT-USA's published rates or by negotiating a special rate for depository libraries.

Training

STAT-USA has reduced its training activities for depository librarians from prior years. STAT-USA conducted over 30 specialized library training programs throughout the country during the first two years the NTDB was operating. We receive continuing requests for additional training classes today. However, it is much more difficult to offer these training classes; they can generally only be considered for large gatherings such as the annual Depository Library Conference, when STAT-USA staff are traveling for commercial conferences, or when traveling costs are defrayed by library organizations. For example, virtually no training has been provided for library access to STAT-USA/Internet. Moreover, a new generation NTDB CD-ROM software will be released in 1996. It is unlikely significant training activities can be held for this new format. This increases the burden on depository librarians to create their own documentation, become self-taught, or rely on other avenues to ensure they can operate these services. STAT-USA could afford to provide additional training if GPO purchased its services on behalf of the FDLP. Alternatively, GPO could negotiate to "purchase" additional training services from STAT-USA if STAT-USA continues to offer free FDLP access.

Fee vs. Free

The final, and most important, issue facing fee-based agencies is the conflict between the federal statutes that seek to assure free public access through the FDLP while also requiring fee-based agencies to recover, not just the costs of dissemination, but also their development costs. Libraries want to ensure the broadest public access to Government information at no cost to patrons. By contrast, fee-based agencies must charge fees to support the creation, organization, and dissemination of their electronic information services, without the protection of copyright or copyright-like restrictions on their use.

The fee versus free issue was a relatively minor issue when library patrons literally walked through a door and used a paper manuscript such as a book or pamphlet. Today's electronic information technology, however, makes this a much more serious issue. Library patrons no longer need to be in the physical library. Instead, they can use library holdings from across the street or around the world. Since U.S. Government information cannot be copyrighted, libraries can freely disseminate Government document collections as broadly as they so chose (and their resources permit.)

These library-based dissemination activities make sense from the library's perspective. It is far easier for educational institutions to create networked collections of information accessible from student dorm rooms or faculty offices than to provide walk-in access to a limited number of computer workstations located in the library. Similarly, a public library may wish to serve all its branches, or offer remote access to its patrons from their homes or offices.

Many examples exist where libraries have subscribed to STAT-USA electronic information products, or received them free of charge as depository libraries, and then redistributed the information via free electronic services. Significant portions of the National Trade Data Bank and virtually all the files found on the Economic Bulletin Board are "repackaged" by one or more libraries and distributed for free. For example, the University of Michigan operates a virtual mirror site of the EBB; they download EBB files every day, post them on the University of Michigan gopher service and make them available to two constituent groups -- students and faculty at the

University of Michigan and other depository libraries. Unfortunately, through their efforts EBB files also are distributed to the rest of the world at no charge. There is so much confusion on this issue that large information vendors such as America Online even refer their customers to the "Economic Bulletin Board at the University of Michigan."

However, the same library dissemination activities place fee-based information services like STAT-USA in financial vises. It is much more difficult for fee-based agencies to organize and operate their electronic information collection activities when the public is increasingly reluctant to pay for data freely available from other sources. This creates a lose-lose situation for the fee-based agency and the depository libraries. The agencies cut back operations because they do not have sufficient revenue to operate their services and the libraries (and other users) receive poor quality service and/or smaller amounts of information. Ultimately, the downward spiral in potential revenues creates strong incentives for fee-based agencies to withhold information from the depository library system altogether and to impose severe restrictions of its use, whether by subscribers or those receiving it through the FDLP. The latter action violates the policy articulated in OMB Circular A-130 that agencies should not impose copyright-like restrictions on government information services.

Attachment D-15

Task 10B: Case study on the National Library of Medicine MEDLINE service

TASK 10B: Evaluate alternatives for including the National Library of Medicine (NLM) MEDLINE data, available as an electronic fee-based service, in the FDLP.

BACKGROUND

MEDLARS is a computerized system of databases and data banks targeted to health professionals and medical libraries. It is operated by the National Library of Medicine (NLM). Users may search MEDLARS computer files to produce a list of publications (bibliographic citations) or to retrieve factual information on a specific question. Users of MEDLARS include universities, medical schools, hospitals, government agencies, commercial and nonprofit organizations, and private individuals. MEDLARS comprises two computer subsystems, ELHILL and TOXNET, on which reside over 40 online databases containing about 16 million references. ELHILL databases provide online access to information on a wide range of subjects relating to biomedicine. TOXNET (TOXicology data NETwork) is a computerized collection of files on toxicology, hazardous chemicals and related areas.

MEDLINE (MEDlars onLINE), part of ELHILL, is NLM's premier bibliographic database covering the fields of medicine, nursing, dentistry, veterinary medicine, and preclinical sciences. Journal articles are indexed for MEDLINE, and their citations are searchable, using NLM's controlled vocabulary, MeSH (Medical Subject Headings). MEDLINE contains all citations published in *Index Medicus*, and also corresponds in part to the International Nursing Index and the Index to Dental Literature. MEDLINE contains about 7.2 million records with about 31,000 new citations added to the database each month. It indexes articles from more than 3,800 international biomedical journals dating from 1966 to the present.

NLM is authorized by law (P.L. 89-941) and by regulation (42 CFR Chap. 1, Sec. 4.7) to charge fees to users of its specialized bibliographic services, including online access, or its information retrieval system computer tapes. There are several different rate structures for the MEDLARS databases. The one most applicable to the FDLP is a fixed-fee rate, available for organizations with many potential searchers. One fixed-fee, one registration, and one ID is established between NLM and the parent organization. The negotiated fixed-fee is based on NLM formulas about anticipated use patterns, and other costs.

NLM is currently offering free access to four MEDLARS databases: three online AIDS databases, as well as DIRLINE, an online directory of health and biomedical resources of all types, primarily in the United States. NLM stills requires a registration process for use of these free databases.

NLM does have an expanding Internet World Wide Web site. However, the head of the NLM Office of Public Information indicated that the NLM Web site is "mature" and would not expand to include more free publications. He said NLM has already identified the databases that it wants to offer free on the Web. One of these, an Aids Bibliography, is currently issued to depository libraries in paper. The others have no print or microfiche counterpart in the FDLP.

FEDERAL DEPOSITORY DISTRIBUTION

There are several publications either currently or formerly delivered to depository libraries in print format which have content included in MEDLARS. For example, MEDLINE includes the citations that are in the print *Index Medicus*, a very costly depository print title. The MEDLINE database also contains information in addition to what appears in the print *Index Medicus*.

The following titles have been discontinued or transferred to NLM fee-based services and are no longer in the FDLP. The resulting in a cost saving to the FDLP, albeit with less information for the program, is noted:

| NLM Publications Discontinued or Dropped From the FDLP | Annual Cost Savings** | Frequency | Media |
|--|--|------------------|--------------|
| National Library of Medicine Current Catalog (last issued 1993) | \$757.89 (500 copies = \$1.52 each) | Quarterly | Microfiche |
| National Library of Medicine Audio Visual Catalog (last issued 1993) | \$7551.64 (461 copies = \$16.38 each) | Quarterly | Paper |
| Cancergrams (last issued 1992) | \$96,457.50 (Estimated 500 copies = \$192.92 each) | 66 per month | Paper |
| Total Annual Savings | \$104,767.03 | | |

** Based on GPO printing and binding costs x number of selecting depository libraries, claims copies, and postage)

On October 5, 1995, members of the Task 10 team and Jay Young, Director of Library Programs Service, met with top NLM officials to ascertain if GPO might establish an agreement with NLM to provide free access to NLM fee-based services for FDLP libraries. A number of issues were discussed, but most importantly for this task, NLM stated that it would not allow free access to the FDLP libraries for its fee-based services. However, NLM has since suggested that the team consider a pilot project involving a limited number of depository libraries. Internet Grateful Med was suggested as a potential test application, following which NLM could examine the issue of pricing. Data collected in the context of such a test could possibly result in the establishment of fixed-fee access for depository libraries.

DISSEMINATION ALTERNATIVES

Alternative A

Simultaneously drop traditional format NLM publications from the FDLP while substituting access to NLM fee-based MEDLARS system for depository libraries. GPO would purchase access to MEDLARS for depository libraries at a fixed-fee rate which would allow for unlimited searching for all its depository libraries, or a fixed amount or ceiling on online use could be arranged based on anticipated use patterns by libraries and other negotiable factors. Part or all of the cost for the depository access to MEDLARS could be met by immediately eliminating paper format distribution of some costly titles from the FDLP.

| Major NLM Titles in the FDLP and Also in NLM's Fee-based Online MEDLARS Service | |
|--|---|
| Current Major NLM Titles | Total Annual Cost** |
| Abridged Index Medicus (monthly - paper) | \$16,477.02 (607 copies = \$27.15 each) |
| Index Medicus (14 issues per year - paper) | \$133,824.33 (730 copies = \$183.32 each) |
| Cumulated Index Medicus | \$187,938.50 (730 copies = \$257.45 each) |
| Total Annual Savings | \$338,239.85 |

** Based on GPO printing & binding costs x number of selecting depositories+ claims copies, and postage.

Benefits

- This approach yields the maximum cost savings to GPO.
- MEDLARS is more timely than its print counterparts.
- NLM ensures that the historical information available through its online service is continually edited and updated. This prevents use of outdated or incorrect information that remains in the paper copies.
- MEDLARS contains additional information that is not distributed through the FDLP.
- Any additional costs to NLM for depository access are offset by the fee paid by GPO.

Disadvantages/Problems

- Public access at or through depository libraries could impact NLM's revenue from its online services, even though GPO is paying NLM a fee for that access.
- To use the service effectively, depository libraries and users will need training that is not required to use the paper products.

Alternative B

Use a phased-in approach where traditional formats and online options will be offered as choices in the FDLP, with the elimination of the paper format to occur at a pre-announced date. If the Transition Plan for the FDLP is approved, the phased approach would have to be concluded by the end of FY 1998 since plan eliminates all dual distribution to depository libraries.

Benefits

- This "parallel" approach will ease the pain of transition on the libraries.
- MEDLARS is more timely than its print counterparts.

- NLM ensures that the historical information available through its online service is continually edited and updated.
- MEDLARS contains additional information that is not distributed through the FDLP.
- Additional costs to NLM for depository access are offset by fees paid by GPO.

Disadvantages/Problems

- It may be difficult to achieve short-term cost savings sufficient to offset the fees for online access with a transitional approach.
- Public access at or through depository libraries could impact NLM's revenue from its online services, even though GPO is paying NLM a fee for that access.
- To use the service effectively, depository libraries and users will need training that is not required to use the paper products.

ISSUES TO BE ADDRESSED

Impact of FDLP Inclusion on Agencies' Fee-Based Services

The statutory and regulatory basis for NLM's information dissemination may operate at cross purposes to the public information goals of the FDLP. NLM is concerned that no-fee access via depository libraries would undercut their market. Fee-based information programs, where the agency must charge users in order to recover costs, are a barrier to participation in the FDLP.

Mission of a Publishing Agency to Disseminate Its Information

Dissemination of information to the general public through the FDLP is not viewed as a part of, or consistent with, the agency's information delivery mission to its primary customers. Although NLM has been willing to have its print publications available through the FDLP, it does not recognize a comparable obligation for electronic information. A clarification of law may be necessary to make it clear to agencies that laws directing agency information dissemination do not, unless specifically stated, eliminate the responsibility for participation in the FDLP.

Attachment E:

**National Commission on Libraries and Information Science (NCLIS)
Principles of Public Information**

**National Commission on Libraries and Information Science
Principles of Public Information**

As Published in the *Federal Register*, Volume 60, Number 111 (June 9, 1995), Page 30609

Principles of Public Information

Preamble

From the birth of our nation, open and uninhibited access to public information has ensured good government and a free society. Public information helps to educate our people, stimulate our progress and solve our most complex economic, scientific and social problems. With the coming of the Information Age and its many new technologies, however, public information has expanded so quickly that basic principles regarding its creation, use and dissemination are in danger of being neglected and even forgotten. The National Commission of Libraries and Information Science, therefore, reaffirms that the information policies of the U.S. government are based on the freedoms guaranteed by the constitution, and on the recognition of public information as a national resource to be developed and preserved in the public interest. We define public information as information created, compiled and/or maintained by the Federal Government. We assert that public information is information owned by the people, held in trust by their government, and should be available to the people except where restricted by law. It is in this spirit of public ownership and public trust that we offer the following Principles of Public Information.

Principles

1. The Public Has the Right of Access to Public Information

Government agencies should guarantee open, timely and uninhibited access to public information except where restricted by law. People should be able to access public information, regardless of its format, without any special training or expertise.

2. The Federal Government Should Guarantee the Integrity and Preservation of Public Information, Regardless of its Format

By maintaining public information in the face of changing times and technologies, government agencies assure the government's accountability and the accessibility of the government's business to the public.

3. The Federal Government Should Guarantee the Dissemination, Reproduction, and Redistribution of Public Information

Any restriction of dissemination or any other function dealing with public information must be strictly defined by law.

4. The Federal Government Should Safeguard the Privacy of Persons Who Use or Request Information, as Well as Persons About Whom Information Exists in Government Records

5. The Federal Government Should Ensure a Wide Diversity of Sources of Access, Private as Well as Governmental, to Public Information

Although sources of access may change over time and because of advances in technology, government agencies have an obligation to the public to encourage diversity.

6. The Federal Government Should Not Allow Cost to Obstruct the People's Access to Public Information Costs incurred by creating, collecting and processing information for the government's own purposes Should not be passed on to people who wish to utilize public information.

7. The Federal Government Should Ensure that Information About Government Information is Easily Available and in a Single Index Accessible in a Variety of Formats The government index of public information should be in addition to inventories of information kept within individual government agencies.

8. The Federal Government Should Guarantee the Public's Access to Public Information, Regardless of Where They Live and Work, through National Networks and Programs like the Depository Library Program Government agencies should periodically review such programs as well as the emerging technology to ensure that access to public information remains inexpensive and convenient to the public

Attachment F:

Definitions

Definitions

The "Federal Depository Library Program" is a nationwide geographically-dispersed system, administered by the Superintendent of Documents, consisting of libraries acting in partnership with the United States Government, established for the purpose of enabling the general public to have local access to Federal Government information at no cost.

"Depository library" means a library, designated under the provisions of 44 U.S.C. Chapter 19, which maintains tangible Government information products for use by the general public, offers professional assistance in locating and using Government information, and provides local capability for the general public to access Government electronic information services.

"Agency" means any Federal Government department, including any military department, independent regulatory agency, Government corporation, Government controlled corporation, or other establishment in the Executive, Legislative, or Judicial Branch.

"Government information" means Government publications, or other Government information products, regardless of form or format, created or compiled by employees of a Government agency, or at Government expense, or as required by law.

"Government information product" means a discrete set of Government information, either conveyed in a tangible physical format including electronic media, or made publicly accessible via a Government electronic information service.

"Government electronic information service" means the system or method by which an agency or its authorized agent provides public access to Government information products via a telecommunications network.

Attachment G:

**Summary of the Results of the
1995 Biennial Survey of Federal Depository Libraries**

Summary of Results of the 1995 Biennial Survey of Federal Depository Libraries

As of January 16, 1996

1,372 Depository Libraries Responding

Online Catalog

| | |
|---|---------------|
| Libraries with online catalogs | 1,175 (85.6%) |
| Libraries with online catalogs with dial-in access | 956 (69.6%) |
| Libraries with online catalogs accessible from the Internet | 854 (62.2%) |
| Libraries with online catalogs networked with other libraries | 745 (54.3%) |

Internet Tools Available for Primary Patrons

| | |
|--|-------------|
| E-mail | 664 (48.3%) |
| Telnet | 799 (58.2%) |
| FTP | 695 (50.6%) |
| Gopher | 841 (61.2%) |
| WAIS | 516 (37.6%) |
| WWW-nongraphical | 559 (40.7%) |
| WWW-graphical | 693 (50.5%) |
| No current Internet access | 265 (19.3%) |
| Plan for Internet access in 1 year | 216 (15.7%) |
| Plan for Internet access in 2 years | 115 (8.3%) |
| No plans to have Internet access for staff | 87 (6.3%) |

Internet Tools Available at Public Access Workstations

| | |
|--|-------------|
| E-mail | 294 (21.4%) |
| Telnet | 534 (38.9%) |
| FTP | 423 (30.8%) |
| Gopher | 617 (44.9%) |
| WAIS | 370 (26.9%) |
| WWW-nongraphical | 375 (27.3%) |
| WWW-graphical | 516 (37.6%) |
| No current Internet access | 341 (24.8%) |
| Plan for Internet access in 1 year | 253 (18.4%) |
| Plan for Internet access in 2 years | 160 (11.6%) |
| No plans to have Internet access for staff | 169 (12.3%) |

Libraries Providing GPO Access

| | |
|---|-------------|
| Registered for GPO Access | 545 (39.7%) |
| Provide through another institution's gateway | 283 (20.6%) |
| No, but have plans to within 1 year | 272 (19.8%) |
| No, but have plans to within 2 years | 131 (9.5%) |
| No, have no plans to | 127 (9.2%) |

Use of the GPO Federal Bulletin Board

| | |
|--|-------------|
| Daily or almost daily use by staff | 15 (1.0%) |
| Occasional use by staff | 123 (8.9%) |
| Less than once a week use by staff | 481 (35.0%) |
| Have not yet registered for the GPO Federal Bulletin Board | 732 (53.3%) |

Estimated Daily Use of Depository Electronic Products

CD-ROMs

| | |
|----------------------------|-------------|
| Not Used | 211 (15.3%) |
| Less than 30 minutes | 483 (35.2%) |
| 30-59 minutes | 240 (17.4%) |
| 1-1.5 hours | 131 (9.5%) |
| More than 1.5 hours | 301 (21.9%) |

Diskettes

| | |
|----------------------------|---------------|
| Not Used | 1,026 (74.8%) |
| Less than 30 minutes | 302 (22.0%) |
| 30-59 minutes | 15 (1.1%) |
| 1-1.5 hours | 6 (0.4%) |
| More than 1.5 hours | 12 (0.9%) |

GPO Access

| | |
|----------------------------|-------------|
| Not Used | 579 (42.2%) |
| Less than 30 minutes | 583 (42.5%) |
| 30-59 minutes | 117 (8.5%) |
| 1-1.5 hours | 41 (2.9%) |
| More than 1.5 hours | 34 (2.5%) |

Federal Bulletin Board

| | |
|----------------------------|-------------|
| Not Used | 936 (68.2%) |
| Less than 30 minutes | 381 (27.8%) |
| 30-59 minutes | 31 (2.3%) |
| 1-1.5 hours | 4 (0.3%) |
| More than 1.5 hours | 3 (0.2%) |

SuDocs World Wide Web Site

| | |
|----------------------------|-------------|
| Not Used | 692 (50.4%) |
| Less than 30 minutes | 547 (40.0%) |
| 30-59 minutes | 71 (5.2%) |
| 1-1.5 hours | 17 (1.2%) |
| More than 1.5 hours | 23 (1.7%) |

Accessibility of Depository CD-ROMs

Accessible from stand alone workstations 1,140 (83.0%)
Accessible from Documents or reference department LAN 157 (11.4%)
Accessible from library-wide LAN 203 (14.7%)
Accessible through a Wide Area Network, beyond the library 109 (7.9%)

Have CD-ROM capability -- do not select depository CD-ROMs 73 (5.3%)
Select depository CD-ROMs -- do not have CD-ROM capability 56 (4.0%)
Do not have CD-ROM capability -- do not select depository CD-ROMs 42 (3.0%)

CD-ROM Drives Primarily Supporting the Documents Collection

None 112 (8.1%)
1 230 (16.7%)
2-4 408 (29.7%)
5-10 327 (23.8%)
11-20 164 (11.9%)
21-40 82 (5.9%)
More than 40 36 (2.6%)

Computer Workstations Available Primarily for Depository Patron Use

| No. of Computers | PCXT | 286 | 386 | 486 | Pentium | Mac |
|------------------|------|-----|-----|-----|---------|-----|
| 0 | 636 | 505 | 421 | 262 | 568 | 603 |
| 1 | 95 | 199 | 275 | 392 | 136 | 68 |
| 2-4 | 85 | 76 | 180 | 402 | 60 | 52 |
| 5-10 | 8 | 9 | 18 | 60 | 7 | 11 |
| 11-20 | 4 | 2 | 4 | 7 | 1 | 1 |
| 21-40 | 1 | 0 | 2 | 4 | 0 | 0 |
| 40+ | 1 | 1 | 1 | 4 | 3 | 3 |

Computer Workstations with Internet Access Available for Depository Patron Use

| No. of Computers | PCXT | 286 | 386 | 486 | Pentium | Mac |
|------------------|------|-----|-----|-----|---------|-----|
| 0 | 811 | 700 | 667 | 564 | 662 | 675 |
| 1 | 22 | 26 | 65 | 174 | 50 | 39 |
| 2-4 | 26 | 16 | 57 | 147 | 47 | 28 |
| 5-10 | 20 | 9 | 25 | 76 | 17 | 26 |
| 11-20 | 13 | 6 | 18 | 55 | 18 | 12 |
| 21-40 | 8 | 1 | 7 | 28 | 9 | 6 |
| 40+ | 3 | 1 | 9 | 36 | 9 | 10 |

Methods of Patron Access to the Internet

Modem 99 (7.2%)
 Direct 625 (45.5%)
 Both modem and direct 161 (11.7%)
 Not Available 78 (5.6%)

If electronic media and online services replace most paper and microfiche distributed through the FDLP in the next two years, would your library retain depository status?

Yes 1,233 (89.8%)
 No 95 (6.9%)
 Left blank 42 (3.0%)

Follow-up letters were sent to those depository libraries who responded "no" to the above question or left it blank. Of these, 62 depositories responded to the letter with more information concerning their initial response.

Cited Financial Reasons 26.3%

Budget shortfall - not keeping pace with inflation
 Mushrooming costs for equipment
 Higher salaries for staff expertise

Cited Staffing Implications of the Transition 17.5%

Lack of public service staff
 Lack of patron expertise
 Training of patrons
 Training of staff on new systems

Cited Problems with Identifying/Preserving/Archiving Electronic Information 10.1%

Cited Problems with Electronic Information Products **8.8%**
Lack of uniform graphical interfaces
Lack of software standardization

Cited Other Library Priorities **8.8%**
Automation
Upgrading OPAC
Installing LAN

Other Reasons Cited:

- FDLP no longer an exclusive source for Government information
- Obligations remain but costs, primarily for equipment, increase
- Access will be restricted to the computer literate

Attachment H:

**Recommended Minimum Technical Guidelines
for Federal Depository Libraries**

Recommended Minimum Technical Guidelines for Federal Depository Libraries

Revised January 1995

In order to assist depository libraries in remaining current with advances in personal computer (PC) technology, the Library Programs Service (LPS) has once again revised the "Recommended Minimum Technical Guidelines." This revision emphasizes the Windows operating system and Internet capability, and is based in part on the findings of the Electronic Capabilities Survey which LPS conducted earlier this year. Libraries having equipment which meets or exceeds these guidelines will be in a position to use the electronic products distributed through the Federal Depository Library Program. In addition, these guidelines support the use of the GPO Access online services, as well as other Federal online information resources.

Although these are recommendations, rather than requirements, LPS strongly encourages depositories to install microcomputer work stations that meet at least these minimum standards. It is also recommended that these guidelines be applied to public work stations, as well as those intended for depository staff.

Minimum Workstation Configuration

| | |
|-----------------|--|
| Computer | IBM-compatible 486DX2 computer operating at 66Mhz |
| Memory | 8 or more megabytes (Mb) of RAM; expandable to 16 Mb or more |
| Floppy Disks | Both 3.5" high density and 5.25" high density |
| Hard Disk Drive | 540 Mb capacity or higher; 15ms or less access time; IDE or SCSI interface |
| Expansion | Minimum of three free expansion bus board slots; 1 or more additional hard drive bay(s) desirable; 2 serial and 1 parallel ports; consider an available ZIF (zero insertion force) CPU upgrade socket. |
| Display | Super VGA (SVGA) compatible, 15" monitor with at least 70Mhz vertical refresh rate at SVGA resolution (800X600) non-interlaced, 0.28 or smaller dot pitch; display card which supports 800X600 resolution at 70Mhz or faster. Consider a 19" high resolution monitor to display 8.5" x 11" full page images. |
| CD-ROM Drive | Single or multiple platter drive compatible with ISO 9660 standard; consider the multi-media supporting standards. (300 K/byte per second transfer rate, double speed support, CD-ROM XA support, include a 16 bit sound board for PC; Ad-Lib or Sound Blaster compatible) |
| Printer | 24 pin dot matrix; Epson or IBM Proprinter emulation compatible. Consider purchase of low cost color dot matrix printers for multi-media output or laser printers for high resolution graphics (HP compatible). |

| | |
|--------------------|---|
| Pointing Device | Microsoft-compatible mouse or similar pointing device to support programs and Microsoft Windows. |
| Modem | 14.4 kbps, meeting V.32, V.42, V.42bis or MNP 5 standards and compatible with Hayes "AT" command set. |
| Network Connection | SLIP/PPP Internet connection, with FTP (File Transfer Protocol) capability. |

Software

| | |
|------------------|---|
| Operating System | Microsoft Windows 3.1 or later (requires MS-DOS 3.3 or higher); Device driver for CD-ROM drive and MS-DOS CD-ROM extensions. |
| Database | dBase file format compatible or dBase and ASCII comma delimited file importing database management software; useful to have fixed field format (SDF) import ability. |
| Spreadsheet | Lotus .WK1 file format compatible software; support for other popular formats such as Excel and Quattro Pro. |
| Word Processing | Software capable of importing major text file formats (Ami Pro, WordPerfect, Microsoft Word, Multimate, etc.) and ASCII text files. |
| Communications | Software package which offers "script" files to automate log-on procedures; and supports XMODEM, YMODEM, ZMODEM, and Kermit file transfer protocols; several terminal emulations such as ANSI-BBS, TTY, VT-100; and capable of up to 19200 bps transfer speeds; supports Hayes "AT" compatible modems; manages telnet sessions. |
| Client Software | WAIS client (EINet WinWais customized for GPO Access recommended), and a World Wide Web browser. |
| Viewers | Adobe Acrobat PDF file viewer. |

Costs

The cost section is being eliminated from this revision. Cost information is readily available, and subject to rapid change and local market conditions. The ranges offered in the previous "Guidelines" were too wide to support accurate planning and budgeting.

Rationale

The above configuration provides ample resources to handle multiple software and CD-ROM retrieval packages, yet is available at a reasonable cost. Current 486DX2 prices are only slightly higher than the 486SX. The ability to run 32 bit specific software in a graphical environment is desirable. Selection of the high end options mentioned in these guidelines will help to delay the onset of obsolescence. The

available system memory can be better utilized by a variety of software. The software recommendations should permit the use of most anticipated government produced products. Microsoft Windows 3.1 software is also easily supported by this configuration.

While this configuration should prove satisfactory, **LPS encourages the purchase of a configuration superior to this if affordable.** The speed at which the computer industry changes dictates that flexibility is a desirable quality in any hardware and software purchases. Systems which are more than adequate today are obsolete tomorrow.

(Published in Administrative Notes, the newsletter of the
Federal Depository Library Program, January 15, 1995)

Exhibit 1:

**Federal Depository Library Program:
Information Dissemination and Access Strategic Plan,
FY 1996 - FY 2001**

**FEDERAL DEPOSITORY LIBRARY PROGRAM:
Information Dissemination and Access
Strategic Plan, FY 1996 - FY 2001**

Prepared For

**STUDY TO IDENTIFY MEASURES NECESSARY
FOR A SUCCESSFUL TRANSITION TO A MORE ELECTRONIC
FEDERAL DEPOSITORY LIBRARY PROGRAM**

**As Required By
Legislative Branch Appropriations Act, 1996**

Public Law 104-53

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FEDERAL DEPOSITORY LIBRARY PROGRAM: Information Dissemination and Access Strategic Plan, FY 1996 - FY 2001

Executive Summary

This strategic plan focusses on the role of the Government Printing Office (GPO) as the administrator of the Federal Depository Library Program (FDLP), covering the period from the remainder of FY 1996 through the end of FY 2001. Emphasizing the incorporation of electronic information into the FDLP, this plan would affirmatively move the FDLP toward a significantly electronic information dissemination and access program. While this plan builds upon the Government Printing Office's December 1995 *Transition Plan*, it incorporates numerous changes which reflect the views and advice of the library community, Federal publishing agencies, and users of Government information.

The FDLP will provide official Government information products in a variety of formats to the nation's nearly 1,400 depository libraries. Incorporating electronic Government information into the FDLP will augment the traditional distribution of tangible products with connections to Government electronic information services. Electronic information will be accessible to the public directly or through depository libraries from a distributed system of Government electronic information services administered by the Government Printing Office (GPO), from other Government agencies, or from institutions acting as agents for the Government. The FDLP will point and link to electronic information services of other agencies or, when appropriate, obtain electronic source files from agencies for mounting on GPO Access. Tangible Government information products will be distributed to libraries, including CD-ROM, diskette, paper or microfiche, as appropriate to the needs of users and intended usage.

Permanent access to Government information is a critical issue in the electronic environment. GPO should, within the context of the FDLP, maintain electronic Government information products for permanent public access, in the same spirit in which regional depository libraries provide permanent access to print products. This requires the development of a distributed system which includes all of the institutional program stakeholders: information producing agencies, GPO, depository libraries and the National Archives and Records Administration (NARA).

Effective public use of Government information, especially in the less-structured environment of the Internet, depends on the users' ability to identify and locate the desired information. Through continuation of its cataloging services, and the development of the Pathway information locator services, GPO can meet this need. GPO should present a suite of services, designed for use by the public as well as by depository librarians.

Significant progress toward a more electronic FDLP can be made by the end of FY 1998 with essentially flat funding. For the out years, FY 1999 and beyond, there are too many variables involved to accurately project program funding requirements at this time. GPO's FY 1997 funding request of \$30.8 million for the Superintendent of Documents (SOD) Salaries and Expense Appropriation assumed that some FDLP expenses, especially those associated with acquiring and shipping physical printed products, would decline as the use of electronic information dissemination technologies increases. However, there will be offsetting cost increases in other areas, such as expanding the capacity of the GPO Access system, acquiring and converting electronic source data files, software licensing fees, etc. An effective transition to a more electronic FDLP requires certain changes to existing law. It is critical to establish beyond question that electronic Government information products belong in the FDLP, and to authorize the SOD to request that the originating agencies provide electronic source data files of their information products. Recommendations for legislative changes to 44 U.S.C. Chapter 19 are included in the study report as task report 6 [Attachment D-5].

Also included in this plan is a brief discussion of the changing roles of regional and selective depository libraries with respect to electronic Government information, and what expectations for public service and access the depository libraries should meet in the future.

To effect significant progress toward accomplishing this transition, technical implementation assistance is required to determine the optimal approach to a number of complex issues. A statement of work for contractor support is presented in Appendix A.

Principles for Federal Government Information

GPO's tactical and strategic planning for the future of the FDLP, as well as the work on this study, has been guided by a set of fundamental principles regarding Federal Government information.

1. The Public Has a Right of Access to Government Information

Exercising this right requires an active role on the part of the public, and assumes a generally passive, or reactive, stance on the part of the agencies.

2. The Government Has an Obligation to Disseminate and Provide Broad Public Access to its Information

Meeting this obligation requires a more active role on the part of the agencies to distribute and publish its information.

3. The Government Has an Obligation to Guarantee the Authenticity and Integrity of Government Information

These obligations, which are met in well-established ways in the print world, pose difficult issues in the electronic information environment.

4. Government Has an Obligation to Preserve Its Information

Preservation and permanent public access are vital components of the national historical record. Preservation should be considered from the earliest stages of the information life cycle.

5. Government Information Created or Compiled by Government Employees or at Government Expense Should Remain in the Public Domain

Use or re-use of government information should not be diminished by copyright-like restrictions, which serve to reduce the economic benefits, or "multiplier effects" associated with unrestricted usage.

Mission and Goals for the Federal Depository Library Program

Within these broad principles, the study has identified the mission and goals for the FDLP. This strategic plan incorporates several different efforts and approaches to achieving these goals.

FDLP Mission

The mission of the Federal Depository Library Program is to provide equitable, efficient, timely, and dependable no-fee public access to Government information within the scope of the program.

FDLP Goals

1. Ensure that the public has equitable, no-fee, local access to Government information through a centrally managed, statutorily authorized network of geographically-dispersed depository libraries.
2. Use new information technologies to improve public access to Government information and expand the array of Federal information products and services made available through the FDLP.
3. Provide Government information in formats appropriate to the needs of users and intended usage.
4. Enable the public to locate Government information regardless of formats.
5. Ensure both timely, current public access and permanent, future public access to Government information at or through depository libraries, without copyright-like restrictions on the use or reuse of that information.
6. Facilitate preservation of Government information through the National Archives and Records Administration. This includes the transfer to NARA of information disseminated to depository libraries by GPO or held by GPO for depository library access.
7. Ensure that the program is cost-effective for all parties involved, including Government publishing agencies, GPO, depository libraries, and the public.

Basic Assumptions for the Information Dissemination and Access Strategic Plan

1. An expanding proportion of the information provided through the FDLP will utilize electronic information dissemination and access technologies.
2. Electronic information will become the preferred medium for the FDLP, although distribution of paper or microfiche will continue when appropriate for users or usage.
3. Including electronic Government information in the FDLP offers opportunities to make more information locally available to the public, with enhanced functionality.
4. An enhanced system is needed to ensure permanent public access, and must include all of the institutional program stakeholders: information producing agencies, GPO, depository libraries and NARA.
5. The GPO Access services authorized by P.L. 103-40 are the foundation for providing electronic access to Government information through the FDLP.
6. An enhanced system is needed to ensure the persistent identification and description of information products available via Government electronic information services.
7. Direct, no-fee access to Government information will be provided to the public by the GPO Access services as a function of the FDLP, and will be funded by the Program.
8. When an agency is required by law to charge for access to their databases in order to recover costs, SOD should reimburse the agency for access to their electronic products at no cost to the depository libraries.
9. Some depository libraries need financial assistance in order to serve the public in an electronic FDLP environment. SOD has requested \$500,000 for "technology grants" in FY 1997.
10. This transition will require certain legislative changes.
11. This transition requires funding the Superintendent of Documents Salaries and Expenses (S&E) Appropriation at approximately the FY 1996 level through FY 1998. Any cost increases associated with expanding the role of electronic information in the FDLP will be funded by reducing the distribution of paper and microfiche.

Definitions

The "Federal Depository Library Program" is a nationwide geographically-dispersed system, administered by the Superintendent of Documents, consisting of libraries acting in partnership with the United States Government, established for the purpose of enabling the general public to have local access to Federal Government information at no cost.

"Depository library" means a library, designated under the provisions of Chapter 19, Title 44 of the *U.S. Code*, which maintains tangible Government information products for use by the general public, offers professional assistance in locating and using Government information, and provides local capability for the general public to access Government electronic information services.

"Agency" means any Federal Government department, including any military department, independent regulatory agency, Government corporation, Government controlled corporation, or other establishment in the Executive, Legislative, or Judicial Branch.

"Government information" means Government publications, or other Government information products, regardless of form or format, created or compiled by employees of a Government agency, or at Government expense, or as required by law.

"Government information product" means a discrete set of Government information, either conveyed in a tangible physical format including electronic media, or made publicly accessible via a Government electronic information service.

"Government electronic information service" means the system or method by which an agency or its authorized agent provides public access to Government information products via a telecommunications network.

FDLP Information Dissemination and Access Plan

I. Background

The Library Programs Service (LPS) of the Superintendent of Documents (SOD), as authorized under Title 44 of the *U.S. Code*, is responsible for administering the FDLP in partnership with over 1,380 participating libraries nationwide. The mission of the FDLP is to provide the American public with access to Federal Government information at no cost to the user.

There are two major areas in which the FDLP can extend its traditional role into the electronic environment:

- Through the cataloging and locator services, enable the public to access the full range of Federal Government information made available through the Program.
- To maintain permanent public access to that information.

These are not new directions; they have been the cornerstones of the FDLP for many years. However, as the Program changes from the delivery of only print products to incorporate electronic information dissemination and access, all of the partners are faced with new opportunities and challenges to their abilities to accomplish these goals in a very different and rapidly-changing environment.

The FDLP strives to ensure that the general public has access to a broad range of Government information maintained over a long period of time. For print or microfiche products, this information is catalogued so that it can be found by potential users. It is housed in local depository libraries which provide public access at the community level. Professional Government information librarians assist individuals in locating the information they need. The costs to libraries are generally three to five times the dollar value of the information products that they receive. The FDLP exemplifies how a Federal program utilizing state and local support can serve the public through shared responsibilities and shared costs.

Electronic information delivery via the Internet, on CD-ROM or its successor technologies, offers potential economies for the Government as a whole. However, the greatest savings will accrue to those agencies which embrace publishing via the Internet. As the costs to Government decline, the costs to libraries and the public, for computers, training, and connections, may increase. In addition, local printing of on-demand copies, often using costly and environmentally unsound technologies, will mean that the user who wants their own copy may pay more than when costs were kept in check by GPO's efficient and effective printing procurement process.

Depository libraries will also be acting in new roles, serving as intermediaries helping the public find paths to Federal electronic information and providing access to that information on site and via electronic gateways. But they will also continue to receive and service printed Government information products while expanding their capability to handle electronic information. Many depository libraries must upgrade their capabilities in order to serve the public effectively in a more electronic FDLP, and this affects the speed with which a successful transition can occur. The transition to a more electronic FDLP must not result in disenfranchising portions of the public which need more time to adapt to the new technologies.

II. Approach to Electronic Dissemination and Access

Government Information Products in the FDLP

The FDLP should offer Government information products in a variety of formats and media, although for reasons of economy the choice of multiple formats for the same content may be reduced.

Depository information will be available in two basic types:

1. Tangible, physical Government information products, including paper, microfiche, and electronic deliverables such as CD-ROM titles distributed to depository libraries. No-charge public use of these physical products will be at or through depository libraries. Should members of the public wish to obtain their own copies they must purchase them as they do at the present.
2. Electronic products from Government electronic information services, which are accessible via telecommunication networks. In most cases, users with the requisite computer equipment and network access will be able to use these products from their home, classroom, or office.

GPO's ability to provide timely and complete access to these information products is closely linked to the receipt of timely notification from the publishing agencies when they initiate, substantially modify, or terminate an information product. In the case of tangible products, SOD requires sufficiently timely notification to "ride" the requisitions to obtain FDLP copies at the best cost. For Government information products accessible from a Government electronic information service, SOD's ability to provide current and accurate locator services is incumbent upon timely receipt of notifications from the originating agency. In addition, prior notification by the agency when the termination of such products is planned is essential to meeting the goal of providing permanent public access through the FDLP.

Incorporating Agency Information Products in the FDLP

GPO should incorporate into the FDLP all types of information products resulting from agency publishing alternatives. These alternatives include publishing tangible products in paper, microfiche, CD-ROM, video, slides, floppy diskettes; or solely electronic products published via a telecommunications network from a Government electronic information service.

When an agency decides to publish a tangible information product, the SOD should obtain the electronic source data file for inclusion on GPO Access. The SOD may receive such files from the originating agency, or as a by-product of replication contracts administered by GPO. Additional detail on processing agency products appears in Appendix F.

Role of the GPO Access Service

The GPO Access service, with its components of the on-line interactive service, the storage facility, the locator services, and the bulletin board, is the foundation which will support FDLP access to Government electronic information products. These products may reside on GPO's computers for direct access; or, through the GPO Access locator services users may be directed to products from other agencies' Government electronic information services. All of the costs associated with information dissemination via GPO Access are being funded by the FDLP.

During the strategic period, through FY 2001, several changes are expected in the development of GPO Access. To support permanent public access, the storage facility will be a key component of GPO Access. GPO supports the concept of distributed "repositories" for electronic data, with primary responsibility falling to the originating agency. However, there is a need for a coordinated program to identify and maintain electronic Government information products for public access when agencies no longer intend to make their information available. This must be a joint effort between the agencies, SOD, NARA, and libraries. GPO Access should play a major role in ensuring permanent access, in much the same way that the regional depository libraries do with traditional print products.

GPO should continue, for the foreseeable future, to enhance its World Wide Web user interface for the GPO Access services. GPO should also continue to support a text-only interface to comply with the Americans with Disabilities Act (ADA).

Making New Information Available through the FDLP

Using the capability to point to agency electronic information services provides GPO an opportunity to bring additional information into the FDLP at relatively low cost. Historically, the FDLP has not been funded at a level sufficient to obtain and distribute retrospective groups of tangible Government information products which were not previously in the Program. Now, when a Government electronic source for information not previously available through the FDLP becomes available, there is a practical way to incorporate that information into the FDLP.

SOD is expected to encounter opportunities to coordinate with other agencies for depository library access to their on-line data. Preferably, such agencies should provide unrestricted, no-fee access for depository libraries. However, when the agency is required to recover costs, or when no such agreement can be reached, SOD should, funds permitting, reimburse the originating agency for depository access to their on-line service. In such scenarios SOD will not be funding direct, no-charge public access, although depository libraries may serve the public via gateways, if permitted under the agreement with the agency.

For tangible Government information products, SOD should continue to begin with current information and move forward. It is anticipated that funding will not be available in the strategic period to add large quantities of retrospective print products to the FDLP.

Reducing Duplication of Product Content

The transition to a more electronic FDLP can occur without major increases in appropriations. The funding source for such a transition to electronics could be the cost savings which accrue to SOD from phasing out paper or microfiche versions of information which is available through the FDLP electronically. Redundant dissemination of content in different formats; e.g. paper and microfiche, or microfiche and electronic, or CD-ROM and on-line, should be reduced for reasons of economy. Only the "core" paper titles such as those listed in Appendix B represent potential duplicate distribution, as their content may also be available electronically.

Cataloging and Locator Services

The Cataloging and Indexing Program, which has a broad legal mandate under 44 U.S.C. Sections §1710 and §1711 will also change significantly. SOD should continue to catalog Government information products which come into its custody, whether in a physical format or an electronic file in a SOD facility. A proposed suite of Pathway services should index and point users to the content of other Government information resources on the Internet. SOD could also use, and when appropriate, create, Pathway GILS (Government Information Locator Service) records designed to assist FDLP users.

Locator Services, including Pathway services, GILS, and the Web Monthly Catalog data application are critical to locating desired information in an on-line environment. The complexity and importance of cataloging products accessible on Government electronic information services will increase.

GPO, in cooperation with the other cataloging agencies, should attempt to consistently utilize existing mechanisms for including in cataloging records information identifying Government information products available at Internet/World Wide Web sites. Increasingly Government agencies are replacing traditional publishing in print formats with access to an electronic information service. For effective public use of these electronic products, it is imperative that location and access information be included in GPO cataloging records so that connections may be made.

The cataloging of electronic products is a major topic of discussion among national cataloging standards organizations. Through its participation in cooperative cataloging efforts, GPO can work with other institutions to implement a consistent methodology to provide the necessary linking information for titles converted from paper or microfiche to an electronic format. Ideally, such linkages will direct users forward to the new electronic edition and backwards to the paper/fiche. Hot links from bibliographic records ("descriptive metadata") to the electronic products can be provided by including the URL (Uniform Resource Locator) or other standardized logical location data in the records.

Historically, most agencies, with the exception of the scientific and technical information agencies, have not cataloged their own information products. GPO's Cataloging and Indexing Program has cataloged a broad range of Government information products, primarily those produced through GPO, adhering to standard library practices and formats. In the case of scientific and technical information, SOD should not duplicate the bibliographic control efforts of other agencies, even though their cataloging may have been created under different rules and standards. SOD should continue to catalog tangible Government information products, but should also plan to obtain electronic source files and related information from agencies to support the provision of detailed locator services. It is anticipated that most agencies, whether through GILS or another mechanism, will not catalog their own electronic information at the

discrete product level. GPO should provide cataloging and locator services for electronic products to agencies, depository libraries, and the public. These services, which were historically provided for print products, have high value to the library community and the public, and do not duplicate other approaches.

Legal Changes Which Support the Transition

In order to carry out this approach and effectively incorporate electronic Government information products, 44 U.S.C. Chapter 19 (Depository Library Program) must be amended. It must be established without question that electronic Government information must be included in the FDLP, grant to the FDLP authority and responsibility for permanent access to Government information products, clarify the roles and responsibilities of depository libraries, and effect numerous administrative changes. Some recommendations for legislative changes, which incorporate the advice of various program stakeholders, are included in the study report as task report 6 [Attachment D-5].

III. Depository Library Roles and Service Expectations

Strengthening the Depository Library System

GPO should reshape its relationship with depository and other librarians in order to strengthen the depository library system and to advance the goal of better serving the public.

In an increasingly electronic environment, GPO should assume an expanded role in the provision of support services for depository libraries and librarians. These system support services should better prepare depository libraries to serve as intermediaries providing direct services to end users. Such expanded services to libraries include, but are not limited to, locator services, user support, training, and documentation. The SOD should provide or facilitate training and user support for depository libraries for the GPO Access services. When the SOD points to electronic services provided by another agency arrangements should be made with the originating agency to provide user support for depository libraries.

Role of Regional and Selective Depository Libraries

The historical distinction between regional and selective depository libraries is still valid with respect to tangible Government information products; however, the distinction is essentially meaningless for products accessible via Government electronic information services. Selective depository libraries are expected to continue to receive (and to retain for 5 years) only those physical products which meet their local collection development policies. Regional depository libraries, with very rare exceptions, should continue to receive all physical products distributed under the auspices of the FDLP, and should retain those products permanently.

Within two years, all depository libraries should be required to provide no-fee public access to online electronic Government information products accessible via Government electronic information services. Selection is no longer valid in an environment where, once on-line, a user at a public access work station can access the full range of FDLP Government electronic information products.

Depository Library Service Expectations

Incorporating a significant amount of electronic information into the FDLP will pose a significant challenge to depository libraries. Some depository libraries will have to accelerate their plans to obtain public access computer work stations, and deal with the demand for local printing and downloading. Depository librarians will have to balance the needs to serve the computer have-nots in our society, while preserving and providing access to the historical Government information products contained in their pre-electronic documents collections.

All depository libraries should provide no-fee public access to Government electronic information products identified in SOD Pathway services, without regard to where that information resides. Fulfilling this expectation will require depository libraries to offer users access to work stations with a graphical user interface, CD-ROM capability, Internet connections, and the ability to access, download, and print extensive products. However, just as depository libraries may now charge users for photocopying, they may also charge users to recover the cost of printing information accessed electronically.

Such electronic capabilities are in accordance with the revised "Recommended Minimum Technical Guidelines" published by SOD in the January 15, 1995 issue of the *Administrative Notes* newsletter. Following the advice of the Depository Library Council to the Public Printer, these or updated capabilities should become requirements for all depository libraries in 1996. Depository libraries should continue to be responsible for the startup and maintenance costs associated with equipment and Internet connectivity required to provide access to Federal Government information in electronic formats.

Technology Grants

Some depository libraries lack the financial resources to acquire the requisite computer or telecommunications resources necessary to adequately serve the public with electronic FDLP information. Based on a preliminary analysis of the responses to the 1995 Biennial Survey of depository libraries, 25% of the libraries do not have public access work stations connected to the Internet. Many of these libraries are planning to offer public Internet access within two years, but approximately 12% of the responding libraries reported no plans to provide Internet access to the public. The lack of public Internet access in depository libraries is a critical missing "last mile" in making Government information available electronically.

GPO's funding request has asked for authority to expend up to \$500,000 in FY 1997 for "technology grants" to depository libraries. If approved, the technology grants are intended to ensure reasonable public access and proximity to at least one electronically-capable depository in every Congressional district. These grants, at up to \$25,000 each, could be earmarked for public access work stations and Internet connections in depository libraries. This one-time financial assistance could enable depository libraries to achieve a minimum level of capability to serve the public with on-line electronic Government information. In order to be eligible for a technology grant, the depository library must demonstrate need and stipulate that no other funding source is available for this purpose.

Training Efforts and Regional Librarians' Conference

SOD should devote additional resources to promoting training and continuing education opportunities for depository librarians, to raise the level of knowledge and skills with electronic information resources. This approach should guide the development of future "Federal Depository Conferences." SOD should provide hands-on training in the use of the GPO Access on-line services, and facilitate training on other agencies' systems.

GPO should inform agencies about issues and concerns in developing Government information products and services suitable for use by the depository libraries and the general public.

GPO should take steps to promote program leadership among the regional depository libraries. Closer cultivation and coordination with the regional depository libraries and their directors should lead to a greater ability to rely upon the regional librarians as field coordinators for the FDLP. To this end, GPO has requested that the statutory limitation on S&E travel be raised by \$20,000 to \$150,000 in FY 1997. GPO has proposed to bring the regional librarians together for a one-time conference, at SOD expense, for training, discussion of state planning initiatives, and a clarification of the regional libraries' role in the administration of the technology grants.

New Focus for the Inspection Program

The depository library inspection program should be redesigned, so that the resources devoted to periodic inspections can be reallocated to FDLP system support and related services to depository libraries. Over the last eight years, 95% of the depository libraries inspected have been found in compliance with the requirements of the FDLP. Now that the SOD-developed depository library self-study has been adopted as an evaluation tool for use by the libraries, the basis for inspections should revert to that specified in 44 U.S.C. §1909, which states that "the Superintendent of Documents shall make firsthand investigation of conditions [in depository libraries] *for which need is indicated* ..." (emphasis added).

SOD should concentrate on site compliance inspections of those libraries which submit unsatisfactory self-studies, have major changes in staffing or facilities, have prior records of non-compliance, or if complaints are received from the public concerning depository library services. SOD personnel should also be available to visit, consult with, and assist a depository library upon request.

Access to Electronic Government Information through Public Libraries

With respect to the electronic information in the program, the FDLP will not be an exclusive source of no-fee Government information to depository libraries. In order to improve the Government information access at the local level, SOD should promote the FDLP electronic services to public libraries. For information delivered via a Government electronic information service, the incremental cost of serving additional libraries or members of the public is minimal. Through a program of outreach to public libraries, SOD could encourage them to offer FDLP electronic Government information to the public.

IV. Administrative and Support Activities

Superintendent of Documents Classification System

GPO's Superintendent of Documents classification system is used to assign permanent and unique identifiers to physical Government information products. This has enabled libraries to shelve and provide access to their physical collections. However, the location requirements of intangible electronic data are not met by the Superintendent of Documents classification system. For electronic information products stored in a digital data repository, permanency and uniqueness could be ensured by applying the "persistent name" (or URI, Uniform Resource Identifier; or "handle"). Over the next few years a standard for "persistent names" should emerge, and GPO should utilize or adapt this approach to identify the electronic information products under our custody. The application of the Superintendent of Documents classification system to physical products should be continued.

Future Distribution of Tangible Products

As the distribution of tangible Government information products declines, SOD may reach the point where it is no longer cost-effective to maintain an in-house distribution capability. The current distribution system for tangible products, the LPS Lighted Bin System, relies upon economies of scale for cost-effectiveness. SOD should carefully analyze the costs of Lighted Bin System maintenance, distribution staffing, space requirements, overhead, etc., to determine the break-even point. If that point is reached, SOD should discontinue the in-house distribution operation, and move entirely to contractual shipping arrangements for the remaining tangible products in the FDLP.

V. Impact of this Plan on other SOD Programs

Changes in the mix of products available through the FDLP will have effects on other SOD programs, most notably on the International Exchange (IES) Program and the Documents Sales Program.

International Exchange Program

The International Exchange (IES) Program provides for the distribution of selected tangible Government information products to specific foreign governments which, in turn, provide copies of their government's information products to the Library of Congress (LC). SOD manages the acquisitions and distribution of the IES Program for LC, and the costs of the copies sent to the IES exchange partners are borne by the SOD Salaries and Expenses Appropriation. Although in prior years the IES partners received publications in the same format as domestic depository libraries, in more recent years this has changed. There is now a significant number of titles which the IES partners receive in microfiche while those titles are in paper for the FDLP. The direct impact on the IES Program of providing more information to the depository libraries in electronic formats will be minimal. As long as the agencies publish in a print format, there will be a ready source of publications for the IES Program. However, the administrative costs of the IES program may rise if the acquisition of IES-only products is handled separately from the acquisitions effort for the FDLP, which will emphasize electronic products. In addition, should agencies choose to move large amounts of their publishing from print media to the Internet, LC may be left with fewer titles to exchange, as many of the foreign partners are unready or unwilling to exchange information electronically.

Documents Sales Program

Similarly, the SOD Documents Sales Program will not be negatively impacted by the transition to a more electronic FDLP. The Sales Program acquires publications independently from the FDLP. Therefore, it will be more affected by the publishing decisions of the originating agencies. In fact, there may be additional opportunities for sales of print format publications which are produced on-demand from electronic information sources, as agencies themselves publish only electronically.

Original

Appendix A: Technical Implementation Assistance - Statement of Work

I. BACKGROUND:

The Government Printing Office (GPO), through the Office of Superintendent of Documents (SOD), manages and administers the Federal Depository Library Program (FDLP). Under this program, the SOD distributes tangible Federal Government information products to approximately 1400 congressionally designated public, academic, law, and Federal libraries throughout the United States and its territories to be maintained for use by the general public. Information products in paper, microfiche, diskette, and CD-ROM, as well as access to electronic on-line information, are provided at no charge to the receiving library.

GPO should incorporate electronic information dissemination and access into the FDLP. It is expected that approximately 50% of FDLP information will be provided electronically by the end of Fiscal Year (FY) 1998. To effectively accomplish this transition, Technical Implementation Assistance (TIA) is required to determine the most cost effective and feasible alternatives for providing access to electronic Federal Government information to the American public through the FDLP. The information to be addressed and access to this information will be in accordance with 44 U.S.C., as amended by the Government Printing Office Electronic Information Access Enhancement Act of 1993 (P.L. 103-40).

The transition will expand the program from a print environment to a mixed print/electronic environment. This will result in new roles and responsibilities for the program that were previously nonexistent. Some Government information which has historically been provided to depository libraries in paper and microfiche formats will be available instead via remote electronic access or will be disseminated in a physical format for local access at a depository library.

Permanent access to Government information must be addressed in the TIA. A more electronic FDLP should augment the geographically-dispersed collections of tangible products with connections to Government electronic information services. However, a system must be developed to ensure permanent public access; one which includes all of the institutional program stakeholders: information producing agencies, GPO, depository libraries and the National Archives and Records Administration (NARA).

II. TASKS:

Based on direction from the SOD, the contractor will conduct surveys and analysis and provide deliverables that will assist in implementation of this plan.

The Office of the SOD will manage this project throughout the TIA period. SOD will facilitate access for data gathering and furnish the contractor with government materials needed.

The following actions will be taken by the contractor:

- A. Conduct a requirements analysis that includes the key participants in the FDLP:
 - 1. A survey of **Federal publishers** in all three branches of Government to determine their current and expected long-term electronic publishing plans and ways in which the FDLP can best support them.
 - 2. A survey of **depository libraries** to determine:
 - a. The electronic technologies best suited to meet user needs based upon expected services made available under the authority of the SOD.
 - b. Technology requirements in libraries to meet local user needs. This will include an assessment of the technological skills of staff and a baseline determination of equipment already available in depository libraries.
 - 3. Consult with **library associations** and others to solicit their input on **user needs** and gain their views as they relate to this TIA. (Appropriate associations and contact persons are listed in Appendix).
- B. Conduct an analysis that will identify alternatives for achieving a more electronic FDLP. This analysis will include the following:
 - 1. A survey of Federal agencies to identify current and expected electronic formats that will be used in creating and maintaining electronic source data files necessary for publishing electronic information products.
 - 2. A survey of information products in the FDLP and the available technologies for providing public access electronically. This survey should address, at a minimum, technologies available for access to information located at Federal agency sites, access to information located at sites operated under the authority of SOD, as well as locally based access at depository libraries. This survey must consider technology relating to:
 - a. Hardware
 - (1) Data storage
 - (2) User work stations, including the capability to download and print information. Determine appropriate ratio for number of workstations per number of users on an average daily basis.

- b. Software
 - (1) Client tools
 - (2) Server tools
- c. Communications
 - (1) Wide Area Networks
 - (2) Local Area Networks
 - (3) Other technologies
- 3. Consideration of findings from the requirements analysis relative to the various roles, capabilities, requirements, and interests of the key participants in the FDLP.
- 4. A cost-benefit analysis and life-cycle costs of each alternative.

III. DELIVERABLES

A comprehensive report that provides:

- A. A requirements analysis that describes and evaluates the results of the surveys and consultation conducted under paragraph IIA.
- B. A technical alternatives analysis that describes and evaluates reasonable alternatives for successfully incorporating electronic information into the FDLP under paragraph IIB. The evaluation of each alternative shall include a cost-benefit analysis.
- C. A technical report on current and expected electronic formats to be used by Federal agencies in publishing electronic information products. This report shall also recommend the appropriate platforms necessary for making this information available for permanent access.
- D. Recommended solutions based on a cost benefit analysis of the various alternatives. For each recommended solution, provide an action plan that outlines steps, with associated costs, to be followed in implementing that solution for key participants as appropriate.
- E. A recommendation of the most appropriate and cost-effective electronic formats for delivering and accessing the various types of information products in the FDLP, based on content, characteristics, and user needs.

IV. SCHEDULE:

- A. The contractor will provide deliverables as defined in paragraph III within four months from the date of contractor award.
- B. Progress Reports will be scheduled as follows:
 - 1. Regular verbal progress reports will be made at least weekly to SOD throughout the contract period.
 - 2. Bi-weekly written progress reports will be made to SOD throughout the contract period.

V. TECHNICAL COGNIZANCE:

Technical cognizance for this task is assigned to Mr. J.D. Young, Director, Library Programs Service, U.S. Government Printing Office, North Capitol & H Streets NW, Washington, DC 20401, telephone (202) 512-1114.

The primary contact for the conduct of this study will be:

Ric Davis
Library Programs Service
Electronic Transition Staff
U.S. Government Printing Office
North Capitol & H Streets NW
Washington, D.C. 20401
Telephone (202) 512-1698

Appendix B: Paper Titles in the FDLP - Core List

There is a core group of publications which must remain in the FDLP in paper. During the strategic period, there will be significant socioeconomic and technical impediments to a broad-based public ability to effectively access electronic information. There are other important considerations as well, such as the "official" nature of the information, and issues of permanent access and preservation.

The following titles contain information which is vital to the democratic process; information critical to an informed electorate. They support the public's right to know about the activities of their government. Maintaining these titles in paper format, whether or not they may be available electronically, is essential to the purpose of the FDLP. GPO will request funding to continue providing these titles to depository libraries in paper format as long as they are published in paper.

I. LEGISLATIVE BRANCH

United States Congress, Joint Committee on Printing

- Congressional Directory
- Congressional Record, final bound edition
- United States Congressional Serial Set, bound edition
(based on the recommendation of the 1994 Serial Set Study Group, and the FDLP study task team, distribution will be limited to regional depository libraries plus one depository library in each state without a regional)

United States Congress, Joint Economic Committee

- Economic Indicators

Law Revision Counsel of the House of Representatives

- United States Code

II. JUDICIAL BRANCH

United States Supreme Court

- United States Reports

III. EXECUTIVE BRANCH

President of the United States

- Economic Report of the President

Office of Federal Register

- Code of Federal Regulations
- Federal Register
- List of Sections Affected (CFR)
- Public Papers of the President
- Statutes at Large
- U.S. Government Manual

Census Bureau, Dept. of Commerce

- Congressional District Atlas
- County and City Data Book
- State & Metropolitan Area Data Book
- Statistical Abstract of the U.S.

National Center for Health Statistics,
Dept. of Health and Human Services

- Vital Statistics of the U.S.

Dept. of State

- American Foreign Policy--Current Documents
- Foreign Relations of the U.S.
- Treaties and Other International Acts of the United States
- Treaties in Force

Office of Management and Budget

- Budget of the United States Government
- Catalog of Federal Domestic Assistance

Appendix C: FDLP System Requirements for Electronic Access

General Requirements

Electronic information for the FDLP will be prepared for inclusion in the GPO Access service in two basic ways: primarily by using agency- or contractor-supplied electronic source data files; and, to a limited extent, by scanning print format products.

When agencies or contractors supply electronic files in a variety of formats, the capability is required to accept the various file formats, and to take whatever steps are necessary to mount them on our system. In order to gain the widest cooperation from agencies, GPO should accept data in whatever file format the agency offers.

As an incentive for agencies to provide their data, SOD will not dictate a file format to the agencies. However, based on a preliminary analysis, standard data formats for the GPO Access services are expected, in the near term, to be ASCII and Adobe PDF (Portable Document Format). In order to fully implement the use of the Open Text (GPO Access Phase II) software, SGML formatted files are required.

SOD also requires the capability to scan/accept scanned information and mount it on our system. This will pertain primarily to products which would have been distributed in paper or microfiche format. Serial or series publications will be maintained in their present format until a dependable, ongoing supply of electronic source files is assured. Scanning, due the associated expense and complexity of producing an acceptable result, is viewed as a secondary choice. The limited application of scanning assumes that the law is changed beginning in FY 1997 to require agencies to provide SOD with their electronic source files. Without the availability of the electronic source files, our scanning requirements could be extensive. Should scanning become our principal avenue for obtaining electronic products, LPS estimates that, beginning in FY 1996, and continuing through FY 1997, from 25,000 up to 40,000 titles (potentially 3 to 4 million pages) will need to be scanned and mounted on the system.

System Requirements

For FDLP information accessed electronically the system **must**:

- be capable of linking multiple users to multiple sites. Since FDLP users include depository libraries and the public at large, the system should have sufficient capacity to support an expanding base of users connecting via Internet, telnet, or modem. Because of resource limitations on our system, users who connect by telnet or modem will be able to use the SOD sites, and will be provided with information to enable them to connect to those sites.
- as long as technologically current, our primary focus will be on the GPO World Wide Web site as the point of entry, or front end, for all of the electronic services of the FDLP.
- support a full range of users; i.e., both depository librarians and the general public, including persons who have less than state-of-the-art computer resources. The system must employ appropriate technologies, such as SWAIS, to comply with the Americans with Disabilities Act.

- support Pathway services, which will utilize Web indexer technology to assist users in locating and connecting to Government information on the Internet.
- provide daily database updates and indexing, including a means to let users know what is new on the system.
- provide the means to authenticate that Government information delivered from SOD sites is official.
- be in full compliance with ANSI Z39.50. Developing a client/server system will facilitate multiple standard user interfaces and reduce the burden on users to learn numerous different interfaces. The use of applications which require customized or non-standard clients should be minimized.
- to the greatest extent practical, offer full-text searching of the electronic files offered on GPO Access. However, for publications which are highly graphics intensive, it is sufficient to provide non-searchable image files.
- have a system design which minimizes life-cycle costs to the SOD, with consideration of the cost implications for libraries and end users.
- have the capability and flexibility to support, in the most cost-effective manner, information of high, medium, and low-level usage.
- have the capability for permanent retention of, and access to, Government electronic products, with data and software "refreshing" as required to support effective public use.

In addition, there is a potential requirement to establish, at an SOD facility, online or "near line" access to CD-ROM titles which have been, or could be, physically distributed through the FDLP. Before defining applications or candidate CD-ROM products for such a service, GPO should identify, investigate and test appropriate technologies, and to explore the costs and benefits of alternative delivery mechanisms.

Appendix D: Transition Chronology

During the tactical period of this plan, spanning fiscal years 1996 through 1998, SOD should undertake the following general activities:

By the end of FY 1996, SOD should:

- Reduce duplication of content by offering only an electronic format where multiple formats now are available (except for core paper titles).
- Develop initial standards for the format(s) of data to be mounted on the GPO Access service.
- Obtain contractual technical implementation assistance to accomplish the transition.
- Investigate technical and cost implications of scanning products which would have been distributed in paper or microfiche.
- Encourage agencies to provide SOD with electronic source files, particularly for serials or series publications.
- Develop guidelines for technology grants.
- Inform the depository library community about the electronic initiatives for the FDLP.
- Attain a product mix of approximately 45% paper, 50% microfiche, and 5% electronic.

In FY 1997, (assuming funding at the requested level) SOD should:

- Perform limited scanning of paper products as an alternative to conversion to microfiche.
- Develop a comprehensive suite of Pathway services to assist librarians and public in locating Government information.
- Concentrate on obtaining source electronic source data files from agencies, assuming that the law has been changed to require agencies to provide such files.
- Restructure the depository inspection program.
- Initiate the "needs-based" technology grants to depository libraries.
- Conduct the "invitational" workshop for regional librarians.
- Accelerate utilization of the GPO Access storage facility, a data "repository."
- Continue to reduce duplication of content by offering only an electronic format where multiple formats now are available (except for core paper titles).

- Attain a product mix of approximately 35% paper, 40% microfiche, and 25% electronic.

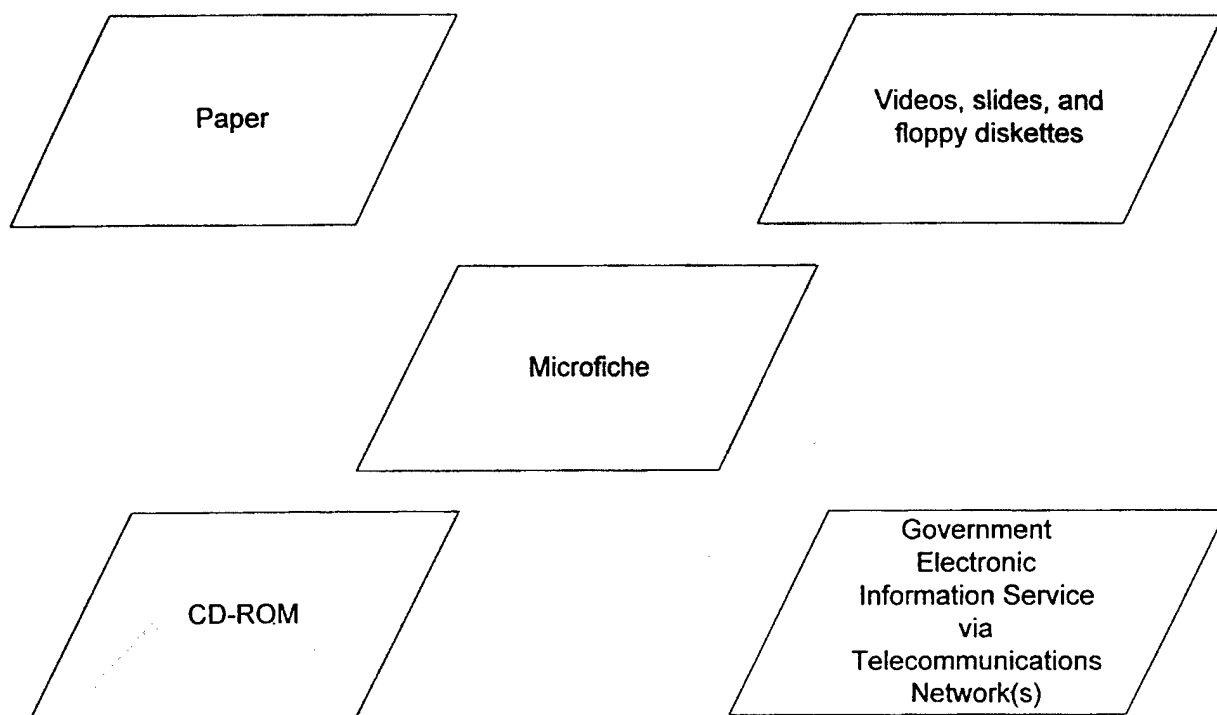
By the end of FY 1998, (assuming funding at or near the FY 1996 level) SOD should:

- Provide about 40% to 50% of FDLP information electronically, by:
 - pointing to products accessible via agency electronic information services;
 - processing and mounting agency-provided source data files on GPO Access;
 - distributing tangible electronic products; i.e. CD-ROM titles; and
 - scanning agency print products for mounting on GPO Access as text or image files.
- Terminate the technology grants effort.
- Achieve a depository product mix of about 50% electronic, 30% paper, and 20% microfiche.
- Have all depository libraries capable of serving the public with electronic Government information.

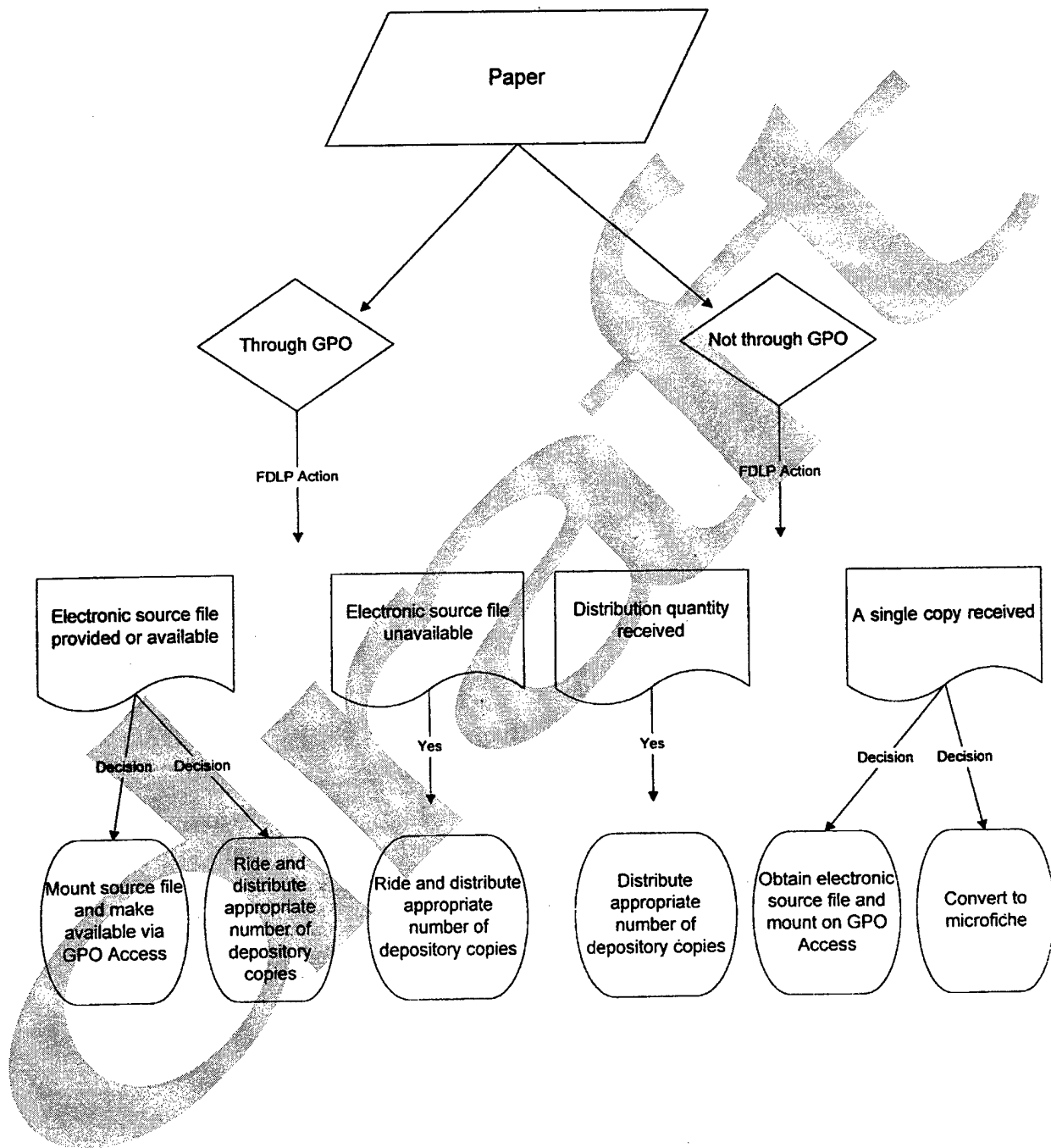
During the period from FY 1999 through FY 2001, SOD should continue to move increasingly toward electronic dissemination and access.

Appendix E: Incorporating Agency Information Products in the FDLP

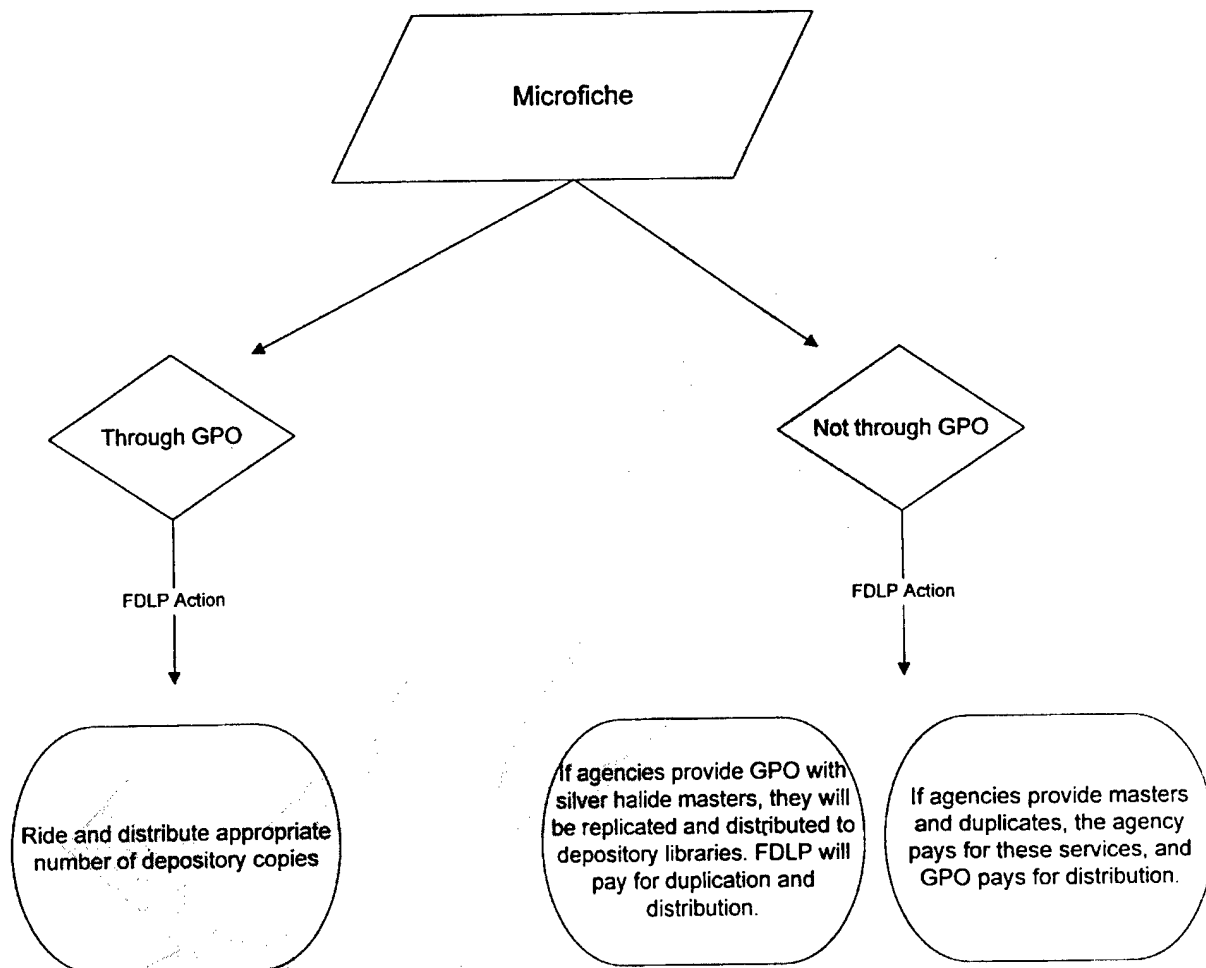
Agency Publishing Alternatives



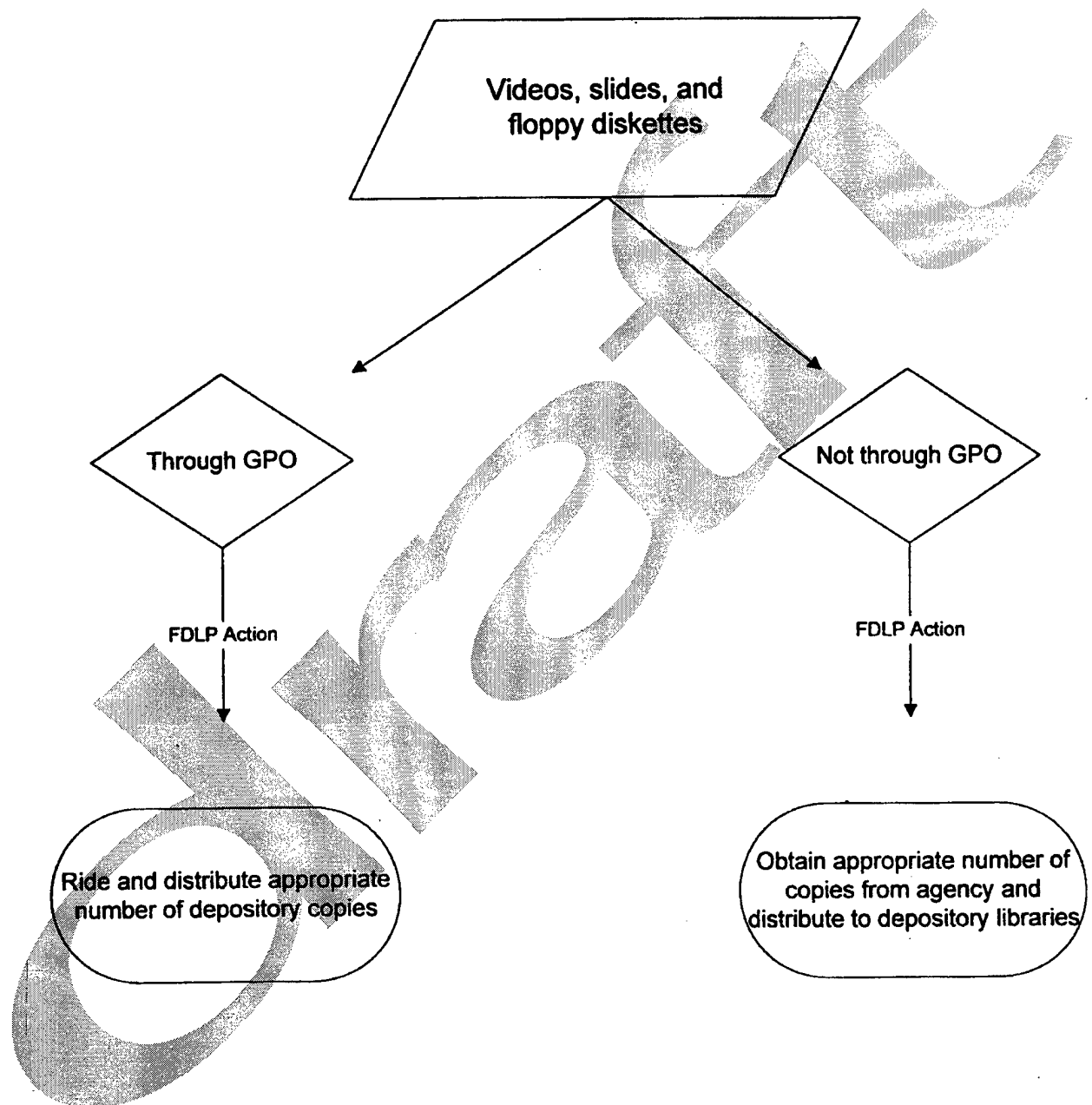
Agency Publishing Alternative: Paper



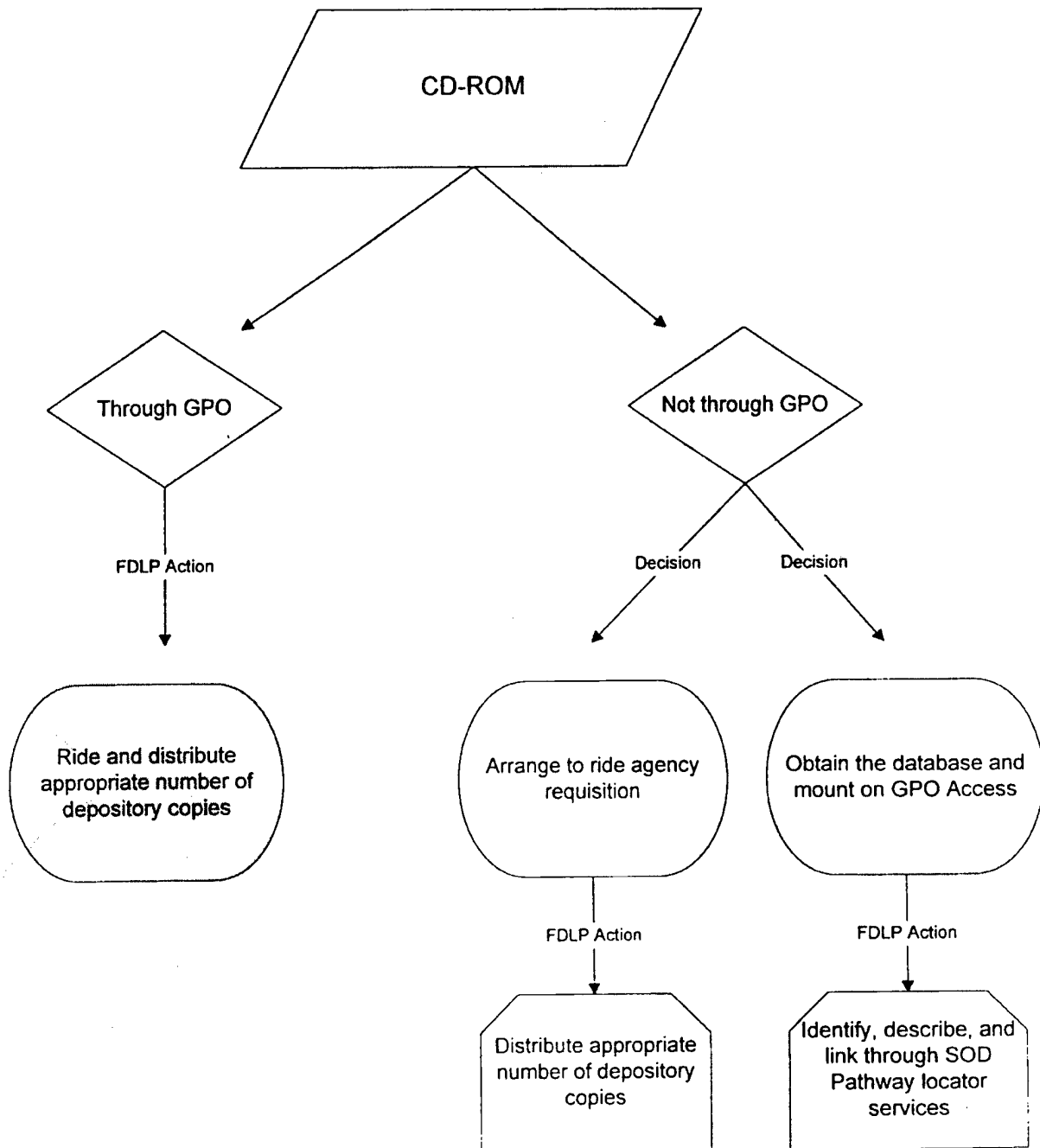
Agency Publishing Alternative: Microfiche



**Agency Publishing Alternative:
Videos, Slides, and Floppy Diskettes**



Agency Publishing Alternative: CD-ROM



**Agency Publishing Alternative:
Government Electronic Information Service
via Telecommunications Network(s)**

